

14TH ANNUAL

brick & click

an academic library conference

EDITORS: FRANK BAUDINO AND CAROLYN JOHNSON



November 7, 2014

Northwest Missouri State University
Maryville, MO

Brick & Click Libraries

An Academic Library Conference

Friday, November 7, 2014

Co-Editors:

Frank Baudino and Carolyn Johnson

Proposal Reviewers:

Frank Baudino, Sara Duff, Terra Feick,
Garland George, Kathy Hart, Hong Gyu
Han, Kathy Howell, Carolyn Johnson,
Al Juhl, Beth Juhl, Lori Mardis, Rollie
Martin, Sarah G. Park, Sharon Samson,
Jessica Schmidt, and Pat Wyatt

Cover Design:

Austin Duda

**Northwest Missouri State University
Maryville, Missouri**

TABLE OF CONTENTS

Navigating Relationships with IT: Strategies for Small and Mid-Sized Institutions 1

Josh Welker, IT Librarian
University of Central Missouri

Stress got you down? Don't frown! Stop by the Rod Library and clown around! 2

Leila June Rod-Welch, Outreach Services Librarian/Assistant Professor
University of Northern Iowa, Cedar Falls, IA

New Collaborations: Bringing Metadata and other Technical Expertise to the Classroom 8

Michelle Turvey-Welch, Associate Professor, Head of Metadata & Preservation
Amanda Harlan, Assistant Professor, Metadata Librarian
Tara Coleman, Associate Professor, Web Services Librarian
Kansas State University

The Value of Collaboration in Demonstrating Your Library's Value..... 15

Joyce A. Meldrem, Library Director
Loras College

Marrying the Old and the New—Using Biophilic Design and Collaborative Learning to Create an Optimal Library Instruction Environment 16

Stephen Ambra, Library Director
Sarah Hébert, Head of Reference Services
NHTI, Concord's Community College

The Cheese Has Moved -- Long Live the Cheese: A Framework for Collective Change Management 22

Susan M. Frey, Acting Associate Dean of Library Services
Valentine K. Muyumba, Chair of Technical Services
Indiana State University at Terre Haute, IN

Patron Driven Acquisitions for Collection Development 31

David L. Alexander, Digital Access Manager & Assistant to the Dean of Libraries
Kathleen A. McElhinney, Metadata / Cataloging Librarian & Head, Technical Services
Catherine Paltz, Technical Services Manager
University of South Dakota

Library Social Media: What Do Students Want? 38

Angie Brunk, Reference and Instruction Librarian
Emporia State University

Think About It: Learning Changes the Brain..... 39

Edith A. Campbell, Associate Librarian, Public Services Department
Indiana State University

Team-Based Learning and Information Literacy..... 48

Mahrya Carncross, Instructional Services Librarian
Western Illinois University

Libraries in Lean Times: Increasing Efficiency, Improving Services, and Cutting Red Tape..... 49

Melissa Clark, Information Services Librarian
Mary Kraljic, Access Services Librarian
Susan Sutthill, Acquisitions Associate
South Dakota State University

Building a Student Employee Program Based on Professional Development..... 58

Adam Fullerton, Library Director, Assistant Professor
Karen Johnson, Circulation Manager
Morningside College

Using the Dell S500wi Interactive Projector for More Engaging Library Literacy Instruction 64

Steven K. Profit, Reference Librarian
College of Charleston

Going the Distance but Doing It Our Way: An Embedded Librarian Program at a Small University 65

Gretchen M. Smith, Collection Development Librarian
Georgia Southwestern State University

Capturing Meaningful Data at the Reference Desk..... 69

Michael R. Mitchell, Reference & Instruction Librarian
Bethel University

Google Scholar Metrics: A New Tool for Faculty to Track Their Publication Citations 78

Fu Zhuo, Research and Liaison Librarian
University of Missouri - Kansas City

"Let's Give This Tree a Friend": Channeling Bob Ross in Faculty-Librarian Partnerships..... 79

Laura MacLeod Mulligan, Information Services Librarian, University Libraries
Adam J. Kuban, Assistant Professor, Department of Journalism
Ball State University

From Reactive to Proactive: Cross-Departmental Collaboration to Minimize Access Interruption Reports 89

Ruth A. Light, Electronic Resources Access Manager
Indiana University

Evaluating Search All: Custom Discovery Search Tool..... 96

Sarah G. Park, Technology and Engineering Librarian
Southern Illinois University Edwardsville

Channeling Your Inner Leader: Library Project Management for All 97

Corie Dugas, Assistant Professor, Outreach & Public Services Librarian
Saint Louis University School of Law

Innovation in using Technology for Library Services 105

Chris Vaughn, Technical Assistant
William Jewell College

From Old Laptops to DIY Digital Displays 106

Ayyoub Ajmi, Digital Communications & Learning Initiatives Librarian
UMKC School of Law

Perpetual Motion: Running a 24/7 Library in a 9 to 5 World 107

Rob Withers, Head of Access Services
Miami University

Moving to a Team Based Library Service Model 114

Judy Wanner, Associate Librarian
University of Guelph

Tweeting and Pinning: Collaborative Research Using Social Media 115

Plamen Miltenoff, Professor InforMedia Services
St. Cloud State University

Gary Schnellert, Associate Professor
University of North Dakota

Using Graphical Depictions of Statistics to Evaluate Collections in an Academic Library 116

Heather M. Rayl, Emerging Technologies Librarian
Indiana State University

Ryan Weir, User Services and Library Technologies Librarian
Rose-Hulman Institute of Technology

Librarians Going Mobile: Applying “Threshold Concepts” to the Design of E-Booklets for Library Instruction..... 124

Lorna Dawes, Assistant Professor. First Year Experience Librarian
University of Nebraska-Lincoln

Black-Belt Student Assistants: Safety in the Library 130

Ellie Kohler, Access and Learning Services Librarian
Rockhurst University

Emergency Weeding! Or, Just-in-Time Collection Development 131

Barbara Cornelius, Head, Library Technology and Archives
Margaret Emons, University Librarian
Martha Tanner, Head, Library Instruction and Reference
Nebraska Wesleyan University

Virtual Reference on a Dime: Creating a Roaming and Virtual Reference Service on a Shoestring Budget 139

Lynn Klundt, Reference and Instruction Librarian
Northern State University

Wikiality Redux 148

Pamela M. Salela, Associate Professor, Library Instructional Services Program
Kara McElwrath, Assistant Director, Client Services, Information Technology Services
University of Illinois at Springfield, IL

Index..... 149

Navigating Relationships with IT: Strategies for Small and Mid-Sized Institutions

Josh Welker
IT Librarian
University of Central Missouri
Warrensburg, MO

Abstract

The presenter is an academic librarian who has served as a liaison between the library and IT departments at a small university and a mid-sized university. He has also worked in an IT department for a K-12 school district. The presenter's unique perspective provides insights into the minds of both academic libraries and IT departments. The presentation explains effective strategies for fostering positive working relationships between libraries and IT. A positive relationship requires a two-fold approach. IT departments need to be made to understand the needs of libraries. At the same time, libraries need to understand the decisions and policies of IT departments. Good communication is an absolute requirement. The presentation identifies common pitfalls that hinder relations between the library and IT. Comparisons are made between the institutional cultures of small and mid- to large-sized organizations and how these differences affect the relationship between the library and IT.

Stress Got You Down? Don't Frown! Stop by the Rod Library and Clown Around!

Leila June Rod-Welch
Outreach Services Librarian/Assistant Professor
University of Northern Iowa,
Cedar Falls, IA

Abstract

During finals week, Rod Library sets up eight tables with various fun activities in effort to help students relieve (cope with) the stress of final exams. To grab students' attention, each table offers activities for students to choose from such as silly putty, play-dough, puzzles, board games, comics, and activity books such as connect-the-dots, coloring books, word finds, and Sudoku. Rod Library wanted to let students know that the library cares, and offer them a bit of encouragement as well as entertainment during their study breaks.

In addition to games and fun activities, Rod Library provides an assortment of fresh fruit, granola bars, and other snacks in the library's lobby. This table is displayed in a prominent location so that it is the first thing students see when they enter the library. These snacks were well received and appreciated. The library staff heard many positive comments from our efforts to make students feel welcome during this stressful time.

In May 2013, the Rod Library surveyed participants in each of the eight activity tables to see what students thought about this event. Over a hundred students voluntarily filled out the survey. In addition, Rod Library compared and evaluated over a hundred research libraries in the United States to see what they have done in regards to de-stressing activities for their students during finals. The results were used to improve the activities Rod Library offered during our fall semester finals week. This research will present activities and creative ideas that might be useful to your library.

Introduction

Academic libraries expanded their services beyond library walls and beyond focusing on academic quest. In recent years, academic libraries have initiated programs that promote student growth and also focus on students' well-being. Reynolds and Rabschutz indicated that academic libraries with some creativity can have a positive impact on student health and wellness (360). These activities and programs can create an inviting and comfortable environment for students.

A study conducted by Sloboda in 1990 called "Combating Examination Stress Among University Students: Action Research in an Institutional Context" reveals that the number of students experiencing a moderate to a high level of stress during their final exams is significant and stress has shown to have a negative effect on exam performance. Ideas about strategies such as peer support, taking time off of work and away from the institution, and exercise to reduce the stress of examinations were explored by Hinchliffe and Wong:

The library has historically focused on the intellectual domain of student development by providing information resources related to the curriculum and services to assist with their use. By thinking about the library as a space and place, unique opportunities to contribute to the holistic development of students emerge. Students already use libraries to do much more than just study and conduct research, whether using library computers to write papers and create presentations or appropriating library spaces for meetings and socializing. The learning commons approach to providing programming to address holistic student development is a natural outgrowth of students' existing library use practices and the information commons service model. (219)

At Rod Library, librarians and staff helped students relax and feel less pressured from finals by providing board games and activities. Students had a positive reaction to the activities, as Rod Library learned from the survey that they conducted. The survey provided tips and positive feedback to help improve their program.

Methodology

This study was designed to evaluate the feedback Rod Library received from students who used de-stressing activities during finals week, and to also find out whether they should continue providing similar services to reduce the stress from finals in the future or modify or discontinue this service. There were eight de-stressing tables in the library; two on each floor set up in highly visible areas for our students. Copies of an IRB approved the survey consisting of six questions were placed on each de-stressing table along with a box to collect the completed surveys. Three times a day at different hours Rod Library staff also provided healthy fruits and snacks in the lobby of the library.

After reviewing the survey results, Rod Library decided to investigate what other libraries have done during finals in order to make our de-stressing activities more successful and fun. For this purpose, the website of libraries who are members of the Association of Research Libraries (125 members) website were reviewed to find out what other libraries have to offer in regard to their students.

Results

The responses of 109 patrons who completed the survey were analyzed. The majority of our surveys were completed by patrons who used the activities. Only four patrons who had completed the survey did not use the activities.

The first survey question asked the respondents whether they used the activities on the de-stressing tables. 96.3% (valid percentage) of respondents indicated yes (N = 105), 3.7% responded no but still completed the survey (see figure 1-- this study reports the valid percentage, the percentage of those who answered a question excluding those who did not answer). If so, they were asked if they liked the activities that were offered. The valid percentage of those who enjoyed the activities was 99% (N = 108) and 1% of the respondents indicated that they did not like the activities (see figure 2).

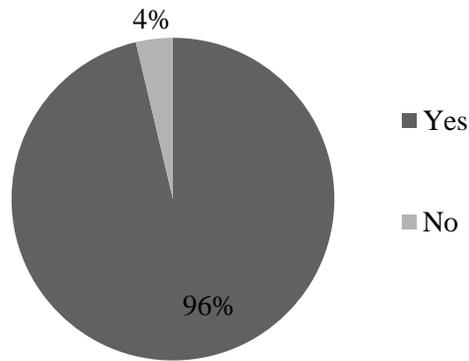


Fig. 1. Did you use the activities on the de-stressing tables? (N = 109)

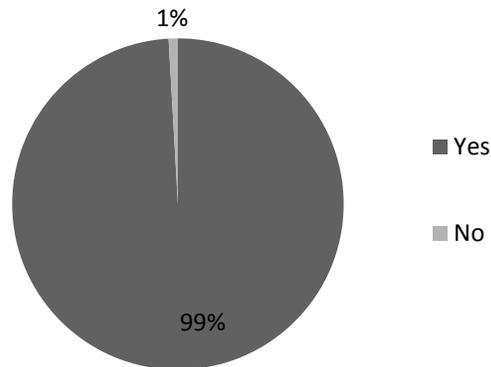


Fig. 2. If so, did you like the activities? (N = 108)

When respondents were asked an open-ended question about which activities were their favorite, they indicated in this order: play dough 34.9% (N = 38), coloring book 24.8% (N = 27), jigsaw puzzle 19.3% (N = 21), checkers/chess 7.3% (N = 8), word find 7.3% (N = 8), Sudoku 4.6% (N = 5), and two responded that they liked all of the activities 1.8% (N = 2) (see figure 3).

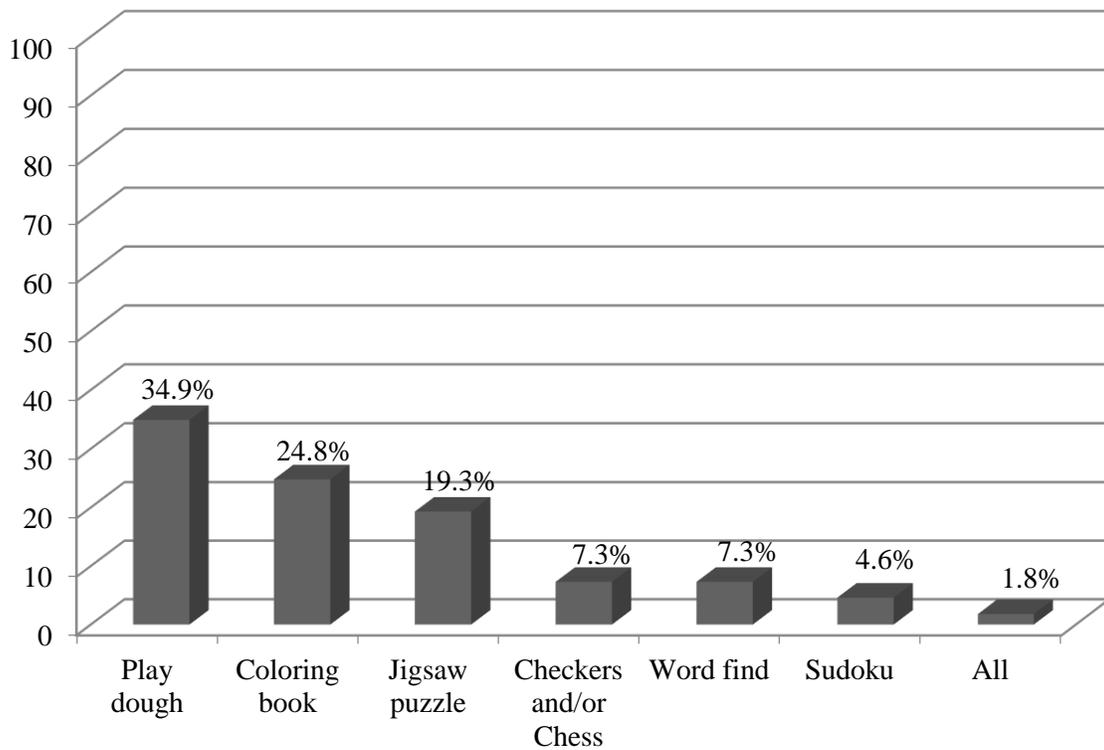


Fig. 3. If you liked the activities, which was your favorite?

Discussion and Future plans

Respondents were asked whether these activities helped them to relax and get their mind off of finals for a short time. 99% (N =105) responded positively that the activities did help them to take their mind off of finals and relax (see figure 4).

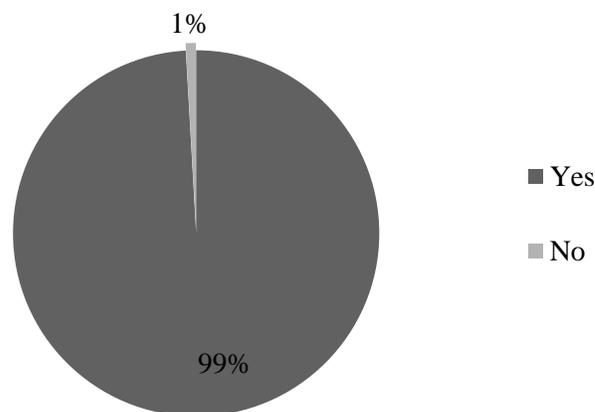


Fig. 4. Did these activities help you to relax and get your mind off of finals for a short time?

When respondents were asked whether Rod Library should offer similar de-stressing activity tables in the future, 99% (N = 108) showed interest and advised us to offer similar activities in the future during finals (see figure 5).

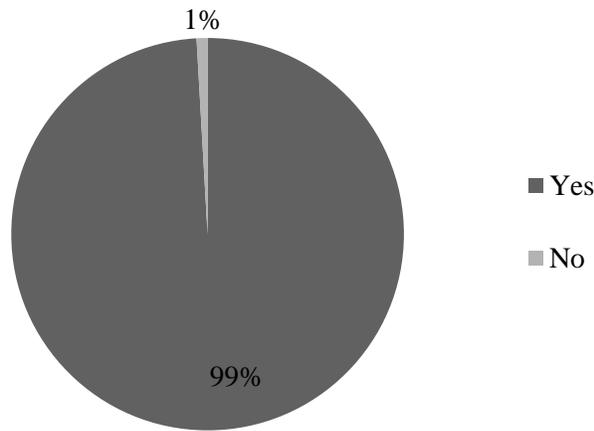


Fig. 5. Should Rod Library have similar de-stressing activities in the future?

Respondents were asked an open-ended question about which activities Rod Library should offer in the future to help them de-stress before and during finals week. Respondents shared a variety of comments. Table 1 shows the answers to this question. Rod Library received comments such as “activities were awesome” and “have them available all the time.” Also, some of the activities that were placed under the category of others were Xbox 360 game, puppies and kittens, candies, blocks, connect the dots and more difficult puzzles, card games, coffee and hot chocolate, Rubik’s cube, Othello board game, and other fun games.

Table 1
What Should Rod Library Offer in the Future to Help You to De-stress Before and During Finals Week?

Activities Offered	Valid Percentage
More play dough	6
Massage	13
Meditation room & yoga	2
Sand art	3
Food	9
Stress balls	6
Others	29
No comments	32

In this study, the websites of libraries that are members of the Association of Research Libraries were reviewed to see what they have done in regard to de-stressing activities for their students during finals. For this study, Canadian universities, governmental libraries, and public libraries were excluded. 108 out of the 125 members of the Association of Research Libraries websites were reviewed. Thirty-three libraries had content available about de-stressing during finals on their library website. However, this does not mean that other academic and research libraries in the United States, belonging to the Association of Research Libraries, did not offer de-stressing activities. It is possible that the other libraries offered de-stressing activities but that they removed the content from their library website when it was no longer current or when the activities were advertised elsewhere.

The most common stress management activities noted on library websites were extended hours (with some libraries being open 24/7 during finals week), free food (ranging from pancake breakfasts for the university population to free coffee & snacks), massage, therapy dogs, and provision of games, puzzles, and popular movies.

Conclusion

While conducting this experiment, college students were able to relax during the stressful times of finals. The survey proved that students were able to relax and have fun. Our library received positive feedback about the activities from the survey and social media sites. Here is an example of one of the comments that Rod Library received

“Big shout out to all the wonderful people working in the LIBRARY! You guys are lifesavers! Keep being awesome, because you are accommodating learning for me and the many other students who are currently in the library cramming for finals! Love the study snacks, and the de-stress tables! Great ideas! I am sure I speak for many when I say that we could not have studied as hard had it not been for you and your extended hours!”

After analyzing our survey results and reviewing the Association of Research Libraries websites, Rod Library provided more board games that are available to check out through the entire year, such as Monopoly, Sorry, Clue, Checkers, Dominoes, Scrabbles, and Yahtzee. Students’ feedback and studying other library websites provided us with new ideas to offer other activities and games such as giant Jenga, Connect 4, a Graffiti wall, chair massages, and paper covered tables, along with crayons and markers, allowing students to have fun and be creative.

Rod Library changed the name of de-stressing tables to Stress Free Zones. Rod Library wants to continue to improve their services to their students and explore additional ideas to help them de-stress. Libraries are now more than a place to check out books and articles. Libraries can even help students relax and have fun.

Works Cited

Hinchliffe, Lisa J, and Melissa A. Wong. "From Services-Centered to Student-Centered: a ‘Wellness Wheel’ Approach to Developing the Library As an Integrative Learning Commons." *College & Undergraduate Libraries*. 17 (2010): 213-224. Print.

Reynolds, Jo Ann, and Laurel Rabschutz. "Studying for Exams Just Got More Relaxing—Animal-Assisted Activities at the University of Connecticut Library." *College & Undergraduate Libraries*. 18.4 (2011): 359-367. Print.

Sloboda, John A. "Combating Examination Stress Among University Students: Action Research in an Institutional Context." *British Journal of Guidance & Counselling*. 18.2 (1990): 124-136. Print.

New Collaborations: Bringing Metadata and Other Technical Expertise to the Classroom

Michelle Turvey-Welch
Associate Professor, Head of Metadata & Preservation
Kansas State University

Amanda Harlan
Assistant Professor, Metadata Librarian
Kansas State University

Tara Coleman
Associate Professor, Web Services Librarian
Kansas State University

Abstract

In the spring of 2014, K-State Libraries embarked on an unlikely venture with the newly created English 695 Digital Humanities class. In addition to the more traditional bibliographic instruction and tour, the libraries offered assistance of a more technical nature, including access to the Libraries' live Omeka instance, basic instruction on the use Dublin Core metadata, information on how metadata choices influence search engine optimization, best practices for writing on the web, and copyright. What was learned from this new type of collaboration? Is this new form of collaboration and engagement the future of academic libraries? How can K-State Libraries share their technical expertise, particularly their metadata expertise with the broader campus? Are there any benefits and/or drawbacks for the libraries? The authors will share lessons learned and their overall observations.

Literature Review

In the traditional humanities, a scholar works alone and relies heavily on print. Librarians have a lot to offer the field of digital humanities. Librarians bring to the table experience creating digital resources and technical experience such as text encoding (Green; Lindstrom and Shonrock). They are also the experts in selection, acquisitions, and organization of information. Another benefit is that librarians have a lot of experience working collaboratively (Siemens), something that not all humanities scholars have experience with.

While the benefits to librarians collaborating with scholars on digital humanities are great, there are barriers to the partnership. While librarians are scholars and researchers too, they are often perceived as doing work that can easily be done by an administrative assistant or graduate student. Librarians have not yet claimed their professional identity (Belzowski, Ladwig, and Miller 3) as scholars, and are often seen to be print-bound, physically rooted protectors of the book. In general, there is a lack of awareness of what librarians do, especially those in more technical positions.

Despite these barriers, collaboration between faculty and librarians is possible. The best way to collaborate is to offer your strengths. In the case of librarians, that may be text encoding (Lindstrom and Shonrock). If you are not sure what to offer, have the faculty talk about what

they want and the librarians can advise them on the ways to do it (Lindstrom and Shonrock). Librarians can also offer a variety of ways to help in the classroom. Often that is by teaching, be it as an embedded librarian, teaching a workshop or one shot class, or a virtual class. Participating directly in the instruction on equal footing is one way to establish expertise.

About Kansas State University and the Kansas State University Libraries

Kansas State University (K-State) was founded February 16, 1863. The university's mission is to "foster excellent teaching, research, and service that develop a highly skilled and educated citizenry necessary to advancing the well-being of Kansas, the nation, and the international community" (Kansas State University). Guided by this mission, K-State Libraries strives to "elevate academic success as an integral partner in research, learning, and discovery (Kansas State University Libraries). Of the Libraries five strategic themes, themes 1-3 served as a guiding principle in the collaborations between the Libraries and teaching departments:

1. K-State Libraries will be a partner in enhancing the research reputation of K-State by developing supportive services and collections.
2. K-State Libraries will build on our culture of teaching and learning that promotes and supports student success and establishes a community of learners in library physical and online spaces.
3. K-State Libraries will increase visibility and understanding of staff, roles, services, collections, and programs of the Libraries to promote the added value that Libraries and librarians bring to engagement.

K-State has a strong tradition of decentralization. This means that resources are often spread out widely and repeated across campus in a variety of forms. It can also mean that there is uneven coverage with varying depth. While there is no physical or virtual digital humanities center on campus, the Libraries have a vested interest in these conversations as digital humanities support is reflected in the Libraries' strategic plan (Kansas State University Libraries).

The Collaboration

An Overview

The collaboration was a result of a meeting hosted by the English Department discussing the digital humanities and a new course being offered, English 695 "Introduction to the Digital Humanities: Humanities, Computing, and Digital Editing." Following the meeting, the Libraries drafted a memo of service for the digital humanities course and offered the following services:

- Copyright 101
- Metadata 101
- Web Design and Writing 101
- Space on the Libraries Omeka instance with basic IT support

With minor modifications, the memo was adopted and in less than a month technical instruction was incorporated in the inaugural digital humanities course.

Technical Instruction

While intended to offer examples of how the Libraries could assist with English 695, the memo became an action plan for the roles the Libraries would play. In total, eight library staff members provided traditional bibliographic instruction, technical instruction (metadata, web design, copyright), and limited systems support of Omeka.

The difference between this collaboration and others is the inclusion of expertise not traditionally shared outside of the library's technical services or systems departments. To the authors' knowledge, it was also the first time the Libraries had offered to host space in a production platform (Omeka with Exhibit Builder plug-in) for a class.

Dublin Core Metadata Schema & Search Engine Optimization

An online class guide was created for the course with sections on the open-source web publishing platform Omeka, writing for the web, and metadata. One 50 minute class covered Omeka and Dublin Core (DC), the underlying metadata schema. A handout linked from the guide provided definitions for the fifteen simple DC elements and best practices for each, including how to format data and what needs to be included to make a page or website more visible to search engines—referred to as search engine optimization (SEO).

The class focused on best metadata practices. The students were asked to decide what metadata was most important on a web page and why it was important. Through this discussion, the SEO best practices were highlighted and to which DC element(s) they related.

Students practiced describing digital objects in Omeka and discussed the thought process behind the descriptions. In this way, the students determined if the information was relevant to the user. For any digital resource, whether at the collection or item level, this question drives what type and amounts of information is used to describe a digital resource, and how visible it can be through the search engines.

Writing for the Web

Writing for the web is a topic large enough to be its own class, but for this collaboration it was limited to one class setting. Inspired by K-State Libraries best practices, a list of basic guidelines for web writing was shared. Students were introduced to the idea of making information scannable, readable, and audience specific.

After the introduction, they were asked to create basic pages in Omeka based on demographic and enrollment information from the 1910-1919 K-State course catalogs. Students were tasked with developing a story (true or not) based on the demographic and enrollment data that followed the basic guidelines introduced. They were encouraged to include the digital object from among those provided to illustrate the story. Student created pages were discussed and ideas to improve them were shared. The exercise also gave the students their first taste of the limitations to an out-of-the-box Omeka site.

Teaching Text Encoding Initiative (TEI) Schema

Although initially not indicated as an area of collaboration by the course instructor, one of the authors and one of the library's programmers provided substantial assistance and support of the TEI portion of the class. The TEI information was covered over six class periods. An overview and brief history of TEI was provided by the professor and the more advanced lessons were provided by a librarian. The advanced lessons covered core TEI elements ("TEI Lite"), six types of text encoded in TEI (poetry, manuscripts, prose, commentary, and drama), and a customizable template with elements specific to poetry for the lab section of the course. The students were provided with a reference guide of commonly used TEI elements and their attributes to assist them with encoding.

Students spent the next three classes using their TEI knowledge to encode poetry from *Rookie Rhymes*, a compilation of poems published in 1917 by the men of the 1st and 2nd Provisional Training Regiments in Plattsburg, New York. The book was chosen as an addition to the existing English Department's The American First World War Poetry Digital Project. In preparation for the lab, the students started a 30-day free trial version of Oxygen, an XML editor. Students divided into groups with each group tasked to encode a different section of the book making sure to come to a consensus on editorial decisions concerning the poetry. There were two encoding options:

1. Encode from the Library of Congress' digitized version of *Rookie Rhymes* made available through Internet Archive (IA)
2. Copy and paste text from the electronic transcription of *Rookie Rhymes* found on the Project Gutenberg website.

This lesson plus the discovery of missing pages in the IA version of the book inspired one group to take on *Rookie Rhymes* as their final group project. They went through all the TEI documents created in class, formatted them for consistency, and encoded the rest of the book that was not done during the lab.

Lessons Learned

Collaboration between the Libraries and English Department

This collaboration, deemed a success by the English 695 professor, is applicable to other departments across campus with a digital humanities emphasis. When the group working on a digital resource about Gordon Parks and *The Learning Tree* discovered that the undergraduate English 220 "Fiction into Film" course was studying that film, they proposed collaboration to the professor who accepted. The graduate students gave an overview of the project, Dublin Core (DC) metadata standards, and Omeka, and then tasked the English 220 class to create metadata for digitized images. The information provided by the undergraduate students would not have been possible without this partnership. What the graduate students taught the "Fiction into Film" class would not have been possible without the Libraries involvement with the digital humanities course.

One aspect that was unique to this collaboration was librarians working with teaching faculty who were not public services focused, instead concentrated in the areas of technical and web services. This was a rare opportunity to share best practices and standards concerning

metadata creation, web design, and SEO, which proved invaluable when the students were working on their final projects.

Assessment

Assessment was integral to this project and a conscientious effort was made to collect feedback from the students, instructor, and the various library collaborators. A brief online survey was distributed to the students regarding the technical instruction provided. The rate of response of the students surveyed was 69% (n=9). A simple scale was used to obtain information on student perceptions regarding the technical instruction presented with zero representing strongly disagree and 5 representing strongly agree. Overall, responses were positive. The responders rated the general metadata information, TEI instruction, and information on the Oxygen XML editor the highest. Students also indicated an interest in other content management systems and how such systems could be customizable (Table 1).

Table 1
Student Responses

I find the following topics covered in class useful:	Mean
General metadata information	4.11
Information on Dublin Core metadata schema	3.89
General information on Omeka, an open-source content management system	3.89
In-class exercises inputting metadata in Omeka	4.00
Information on the TEI metadata schema	4.11
Information on the Oxygen XML editor	4.11
In-class exercises using TEI	4.33
General information presented on good web design	3.44
In-class exercises creating exhibits in Omeka	3.78
General information presented on copyright	3.89

Feedback was also collected from the English 695 faculty member at a debriefing meeting with the Libraries after the semester ended. The conversation with the instructor was positive with the invitation to return to the course as collaborators in the spring of 2016. Before the next class, there were some issues from the feedback that needed to be addressed.

Omeka

One consistent theme was the upgrading of Omeka. It was restrictive in terms of web design and limited them on what they could do with their online exhibits for their final projects.

Encoding

Students said they needed more time to practice encoding in the TEI schema. The students each had a 30 day trial version of Oxygen, which limited the amount of time they could practice. This will be resolved shortly when a departmental license is purchased by the English Department. It was also suggested that more lab time be created to work on

encoding. More time to practice could be accomplished by changing to a longer class block, having a separate lab in addition to lecture, adding an independent study, or flipping the classroom for copyright, metadata, and web-design to provide more time on task.

Final Project

Lastly, it was agreed that the students need more time for their final projects. Students only had two weeks on the syllabus devoted to their final project, but that may be changed to five weeks the next time the course is taught. It was also suggested to assign the final project topics at the beginning of the semester and have each assignment build onto it. It was also suggested that the site visits to K-State's Marianna Kistler Beach Museum of Art and The Morse Department of Special Collections be done earlier in the semester, allowing more time to select material for the final project.

Many of the suggestions brought up in the debrief meeting will be incorporated into the next class. Other additions to the next class will be incorporating social media in digital humanities and a recommendation of collections that are unique and valuable to the K-State community.

Conclusion

The Libraries achieved a number of short and long term benefits from being involved with the class. Many of the benefits anticipated came to fruition: a means to share our expertise, ability to grow digital collections at a campus level, engagement with departments outside of the Libraries, and exploring various partnerships. The collaboration has served as a potential model for future engagement surrounding digital collections.

By allowing the students to handle the scanning, metadata creation, editing, web design and layout of the exhibits, the Libraries obtained additional temporary staffing. The students also benefited directly from the collaboration. They gained experience with hands-on digital projects involving real collections. Their projects allowed them to grapple, if only briefly, with the myriad of challenges surrounding digital collections. Ultimately, such partnerships could allow the Libraries to gain additional exposure for hidden collections.

The partnership also allowed the Libraries to further explore their involvement in the digital humanities on campus. The creation of a digital humanities program is a goal within the Libraries' Faculty and Graduate Services Department's strategic plan. Another related goal from the Libraries' Metadata & Preservation Department's strategic plan is to become more involved in providing non-MARC metadata expertise. This partnership allowed both to happen.

Beyond the course, the collaboration opened other opportunities. A discussion surrounding possible hosting of the American First World War Poetry Digital Project World War I (WWI) Poetry Archive has begun between Libraries' administration and the English Department. In addition, three members of the Libraries directly involved with the course have been invited to serve as members of a Digital Media Team that is part of a National Endowment for the Humanities (NEH) grant the English Department applied for related to the WWI Poetry Archive.

As seen above, the collaboration with the English 695 digital humanities course has shown the Libraries that there are many possibilities for future partnerships with other constituents. It has also demonstrated that the Libraries can contribute their diverse expertise within and outside the K-State community and planted the seeds for future conversations surrounding the digital humanities.

Works Cited

- Belzowski, Nora, Parker J Ladwig, and Thurston Miller. "Crafting Identity, Collaboration, and Relevance for Academic Librarians Using Communities of Practice." *Collaborative Librarianship* 5.1 (2013): 3-16. *Library Literature & Information Science Full Text*. Web. 12 June 2014.
- Burnard, Lou and C. M. Sperberg-McQueen. "TEI Lite: Encoding for Interchange: an introduction to the TEI. Final revised edition for TEI P5." *TEI: Text Encoding Initiative*. (2012). Web. 17 June 2014. <http://www.tei-c.org/release/doc/tei-p5-exemplars/html/tei_lite.doc.html>.
- Calhoun, Karen. "Being a Librarian: Metadata and Metadata Specialists in the Twenty-first Century." *Library Hi Tech* 25.2 (2007): 174-187. *Emerald Insight*. Web. 12 June 2014.
- Cunningham, Leigh. "The Librarian as Digital Humanist: The Collaborative Role of the Research Library in Digital Humanities Projects." *Faculty of Information Quarterly* 2.1 (2010). Web. 12 June 2014. <<http://fiq.ischool.utoronto.ca/index.php/fiq/article/view/15409>>
- "DCMI Metadata Terms." *dublincore.org*. The Dublin Core Metadata Initiative (DCMI), n.d. Web. 17 June 2014. <<http://dublincore.org/documents/dcmi-terms/>>.
- Green, Harriet E. "Facilitating Communities of Practice in Digital Humanities: Librarian Collaborations for Research and Training in Text Encoding." *Library Quarterly* 84.2 (2014): 219-232. *JSTOR*. Web. 12 June 2014.
- Kansas State University Libraries. "K-State 2025 Strategic Direction Action Plan and Alignment Template for K-State Libraries." *www.k-state.edu*. Kansas State University. n.d. Web. 8 June 2014. <<http://www.k-state.edu/2025/documents/K-State-2025-K-State-Libraries-Strategic-Direction-Action-and-Alignment-Plan-December-2012.pdf>>.
- Kansas State University. "About K-State." *www.k-state.edu*. Kansas State University, n.d. Web. 10 June 2014. <<http://www.k-state.edu/about/>>.
- Lindstrom, Joyce and Diana D. Shonrock. "Faculty-Librarian Collaboration to Achieve Integration of Information Literacy." *Reference & User Services Quarterly* 46.1. (2006): 18-23. *JSTOR*. Web. 12 June. 2014.
- Parry, Marc. "How the Humanities Compute in the Classroom." *The Chronicle of Higher Education* 60.17 (2013). Web. 12 June. 2014.
- Plattsburgh Barracks (N.Y.). *Rookie Rhymes*. New York: Harper, 1917. *Harvard University*. Web. 11 July 2014. <<https://archive.org/details/rookierhymes00nygoog>>.

The Value of Collaboration in Demonstrating Your Library's Value

Joyce A. Meldrem
Library Director
Loras College
Dubuque, IA

Abstract

One of the goals of the Loras College Library's strategic plan, that was set into motion in January 2012, was to seek new and increased funding for the Library and our first objective was to seek additional funding from the College's administration. We felt we needed to educate and appeal to the administration in a specific sense and to the regents in a broad sense.

In order to accomplish this goal, we decided to:

- conduct research regarding the effect of college libraries on the Loras College President's goals of retention, recruitment, philanthropy, alumni relations, and student achievement
- apply these findings to the Loras College Library and select key data
- create a short and visually engaging presentation and publication which expressed the value of the Loras College Library to these audiences.

We used collaborative processes to gather our research, synthesize our information, create, rehearse, and edit a PowerPoint presentation, collect and analyze data, and discuss the importance of various points of research and data for the presentation. This collaborative process stacked up into a final product the library staff could be proud of and provided the administration with a view of the value of the library that most had not considered before.

Marrying the Old and the New—Using Biophilic Design and Collaborative Learning to Create an Optimal Library Instruction Environment

Stephen Ambra
Library Director
NHTI, Concord's Community College

Sarah Hébert
Head of Reference Services
NHTI, Concord's Community College

Abstract

The NHTI Library's new instructional lab is an innovative approach to instruction and learning that incorporates the principles of biophilic design, collaborative learning, and tablet technology. Using biophilic design as a guide the lab features carefully selected furnishings, forms, and colors, all chosen to bring the outdoors inside. The lab was also designed to foster collaborative learning through the use of tablets and moveable furniture. But, does it work? And, if so, what are the results, applications, ramifications, and short and long-term effects? This paper examines the goals, principles, hopes and needs which galvanized the instructional lab initiative and shares images of the lab's transformation from a computer lab to an innovative instructional space.

Introduction

In 2013 the computers in the NHTI Library's instructional lab were scheduled to be replaced. The Library used this opportunity to rethink how the lab was designed and utilized. The original lab had desktop computers sitting atop long tables. The room was oriented lengthwise and left little space to move, particularly as the electrical and computing connections were located in the floor. Furthermore, the placement of a teacher's station at the front of the room meant that the lab was only conducive to lecture-style methods of teaching and made collaborative learning virtually impossible. Lastly, it was difficult to keep students engaged in learning when white walls, cold tile flooring, and cumbersome, formulaic furniture made the space feel lifeless and claustrophobic (see fig. 1).

Critical to the success of the undertaking was establishing the framework by which and how decisions would and could be made – and by whom. It was vital to identify the stakeholders and attempt to bring into the process all factors – known or those that might emerge – which might affect the choices and the decisions to be made. For the NHTI Library the planning process was open to Library staff with final decisions resting with senior staff, thus creating a process based on trust and mutual respect that was both horizontal and vertical. It was agreed that the process would need to be creative, organic, open to change, and able to thwart conventional thinking. In addition, stakeholders outside of the Library were identified – including students, faculty, college administration, campus security, and the IT department – in order to consider the needs of everyone who would be impacted by the change.



Fig.1. NHTI Instructional Lab

Literature Review

The NHTI Library’s Instructional Lab draws together the disparate elements of biophilia, collaborative learning, and tablet technology, thus transforming a computer lab into a unique, innovative learning environment. Biophilia is only just beginning to be fully explored as a field of study (Carroll 4). Edward O. Wilson’s 1984 work *Biophilia* first articulated the correlation between humans and nature. In 2005 Kellert proposed a new architectural model which bridges the disconnect between human beings and the natural world (*Building for Life* 4). Beatley noted the success of the model in his 2011 work *Biophilic Cities* and found that while still not in the mainstream, biophilic design was becoming part of the architectural conversation and more elements of biophilia were appearing in designed environments (83). Furthermore, recent studies have shown the correlation between collaborative learning and optimal furniture design. Lippman found that students work best in flexible spaces thoughtfully designed to encourage creativity and critical thinking (32). At the same time, selecting appropriate furniture creates a functional and adaptable learning environment (Bingham 22). The literature which combines biophilic design, collaborative learning and tablet technology as a unified concept is very limited. This paper seeks to bridge the gap between concept and application.

Choosing Tablets

“Why not tablets?” was the question that drove the planning process as to which device – desktop, laptop or tablet – would be adopted for the NHTI Library’s instructional lab. In determining which device best met the Library’s needs, it was important to attempt to identify factors which could reasonably impact the decision – including leaving room for unforeseen circumstances which would only emerge during the course of the process. Factors initially identified included:

- Meeting the demands of the College's policy on Information Literacy and the Educated Person
- Assessing and understanding who our students are and their educational needs, including the degree of sophistication as to the use of computers and other devices
- Accommodation of different learning styles
- Anticipating who our future students will be and their degree of electronic sophistication
- Facilitation of bibliographic instruction and the impact on reference services;
- Impact on the Library as a whole
- Theft concerns and the need to work closely with campus security
- Liaising with IT, including trends in computing and technology, as well as peering into the future
- Having the complete support, confidence, and trust of the College's leadership

Site visits were extremely important in considering which device to adopt. Library staff members visited local schools to see how tablets could be utilized in the classroom. Discussions with teachers and students addressed several of the concerns. It was revealed that students adjusted to using tablets easily. Furthermore, incidents of theft had not been a problem and software could be purchased that would track the location of tablets. Cases were also available that could help prevent damage when tablets were accidentally dropped. Lastly, the battery life of tablets was much better than laptops.

Also key to the decision-making process was working closely with the Library's liaison from IT to find a device that met the needs of today while anticipating tomorrow's changes in technology. Working together it was agreed that tablets provided the needed flexibility, functionality, battery life, and affordability. The Library purchased two sets of tablets – twenty for the instructional lab and twenty-five that students can borrow at the service desk. Wi-Fi and the tablet's inherent flexibility made possible the exciting prospect of using the whole of the Library as a "flex" lab. Students are asked to leave their driver's license at the service desk and can use the tablets anywhere in the building.

Librarians began using the tablets during instruction in the fall of 2013. The results have been extremely positive. The majority of students are excited to use tablets and adapt to the touchscreen without difficulty. Battery life is better than expected and the tablets can be used for several hours in succession without needing to be recharged. Most importantly, the students report that they enjoy working with the tablets and are more engaged than in previous semesters when each student was seated at a desktop computer.

The success of tablets in the Library has spread across the NHTI campus to other departments which – after trialing the Library's tablets – are adopting them in support of their curricula. Rather than purchasing tablets for all the departments requesting them, the Library will be the tablet circulation point for these departments which initially includes nursing, general studies, athletics, and dental. As fewer tablets will have to be purchased, it is reasonably anticipated that the results of the tablet circulation initiative will produce a cost savings for the College.

Biophilic Design

While tablets represented the latest in innovative technology, they were not able to address all of the Library's concerns. Namely, the space still felt like a computer lab – low ceilings, a lack of natural light, mundane colors and design, and formulaic furniture. The space's location and structural features could not be changed; however, a radical thought was entertained – could the space be revitalized by bringing in elements from nature?

The concept of biophilia was first introduced by Edward O. Wilson in his work, *Biophilia*. Wilson described it as, “the innate tendency to focus on life and lifelike processes (1).” In modern day architecture this concept is beginning to influence how buildings and spaces are designed by incorporating natural elements, such as plants, water features, natural lighting, and wooden furnishings. Studies have shown the benefits of biophilic design. Hospitals report improved healing, faster recovery times, and increased staff productivity (Gonchar 115). Further, schools have found that students are less stressed and demonstrate increased intellectual ability (Kellert “Designing Healthy Schools” 59).

Biophilic design can be incorporated into a building or space in several ways including vegetation, water features, patterns or forms inspired by nature, décor made from natural materials, and views of the outdoors. In the NHTI Library, materials were chosen that mimicked nature. First, the uninspired tile floors were replaced with vinyl flooring, carefully selected to have a texture and pattern similar to wood flooring. The vinyl makes the space feel much warmer and has proven to be easier to maintain than tile. Secondly, furniture was selected that mirrors natural shapes and movement. Right angles were avoided in favor of curves. Further, the furniture is on casters, which allows students and instructors to move pieces around and reflects the constant change of a natural environment. Lastly, the lab's walls were covered with bold shapes and colors. Dark green and purple stripes on a light green background were designed to move around the walls and abstractly resemble trees. Because of the placement of the stripes there is no focal point to the space. Instead, it feels natural to teach and learn in a variety of places throughout the room.

The outcome of the redesign has been overwhelmingly positive. Students are more attentive and relaxed during instruction. They often comment on the lab's design as they enter and have been known to ask their instructors, “Can we have class in here *every* day?” Further, instruction librarians report that they feel more energized teaching in the new lab. Finally, the lab's redesign has gained the attention of faculty members and staff throughout the College. It has become a special stop on the NHTI campus tour. Parents are impressed with such a learning environment and students are excited by the prospects of being able to use the technology.

A Space for Collaborative Learning

The lab was originally designed for lecture-style teaching. Computer tables were closely spaced together in rows facing a projection screen at the front of the room. Consequently, the librarian could not, except with some difficulty, see and/or help students as they attempted to follow the lesson on their desktop. The number of desktops and the arrangement of the furnishings also meant that the lab was both restrictive and constrictive—no more than twenty students could work comfortably in the lab. In addition, the Library's instructional

curriculum has changed in the last few years to incorporate a variety of teaching methods including group work, kinesthetic activities, and problem-based learning.

Choosing tablets instead of desktops eliminated the need for large, stationary tables and provided an opportunity to choose furniture that was durable, flexible, and adaptable. Paramount to the decision-making process was the need for chairs and tables to be easy to move to suit various types of learning activities. Tables with a wooden finish were selected that have casters and can be effortlessly moved into a variety of configurations suitable for working in large or small groups. In addition, five tablet desks were chosen and provide students with an option to sit or work alone. Most importantly, mobile furniture allows students to arrange the space to meet their needs.

The redesigned lab is far more functional. Librarians and students can move around the room more easily than before. Furthermore, tablets allow librarians to step away from the teacher's station and move around the lab as they teach. This ability enables the librarians to give students individual attention and allows greater flexibility in teaching methods. The curriculum now focuses less on lecture-style tutorials and more on collaborative and problem-based learning activities. Finally, because the furniture is smaller, more students can comfortably fit into the space. Instead of twenty students crowded into the small space between large tables, thirty students can comfortably fit into the new space (see fig. 2).



Fig. 2. Redesigned instructional lab.

Conclusion

The instructional lab's redesign proved to be challenging, exciting, and inspiring. Through detailed planning and the ability to be flexible the Library was able to create a space that is warm, inviting, adaptable, and conducive to learning. The following principles provided guidance through the process and will be applied to other future initiatives:

- The desire to not recreate what already exists
- The ability to take risks and apply new ideas
- Understanding and meeting the needs of the students of today and tomorrow
- The importance of liaising with other departments
- The expectation that some aspects of the redesign/process would not be successful and ability to make changes as needed
- The importance of assessment and examination
- Buy-in from library staff, college administration, and other stakeholders

The NHTI Library's instructional lab embodies an intriguing juxtaposition between the old and the new. Incorporating biophilic design and collaborative learning with the latest in innovative technology has produced a dynamic learning experience which meets the needs of students in a new and exciting way. Key to that success is to balance advances in technology against the underlying principles which guided the creation of the instructional lab. In the end, an emphasis placed on teamwork, thorough planning and receptivity to new ideas resulted in the creation of a unique space that promotes, embraces, and encourages learning.

Works Cited

- Beatley, Timothy. *Biophilic Cities: Integrating Nature into Urban Design and Planning*. Washington: Island Press, 2011. Print.
- Bingham, Victoria. "A 21st-Century Fit." *American School & University* 86.2 (2013): 22-25. *Academic Search Complete*. Web. 5 May 2014.
- Carroll, Megan Brianne. "Winding Down and Looking Up: Weaving Activity Through Nature as a Method of Biophilic Design." MA Thesis. Dalhousie University, 2012. Web. 5 May 2014.
<dalspace.library.dal.ca/bitstream/handle/10222/15778/Carroll%2c%20Megan%2c%20MArch%2c%20ARCH%2c%20November%202012.pdf?sequence=1>.
- Gonchar, Joann. "Nature Nurtures." *Architectural Record* 200.8 (2012): 114-118. Print.
- Kellert, Stephen R. *Building for Life*. Washington: Island Press, 2005. Print.
- Kellert, Stephen R. "Designing Healthy Schools." *Independent School* 65.1 (2005): 58-61. *Professional Development Collection*. Web. 5 May 2014.
- Lippman, Peter C. "Collaborative Spaces." *THE Journal* 40.1 (2013): 32-37. Print.
- Wilson, Edward O. *Biophilia*. Cambridge: Harvard UP, 1984. Print.

The Cheese Has Moved -- Long Live the Cheese: A Framework for Collective Change Management

Susan M. Frey
Acting Associate Dean of Library Services

Valentine K. Muyumba
Chair of Technical Services
Indiana State University
Terre Haute, IN

Abstract

In this paper the authors consider a difficult period of change in their library's history, a time when their university was losing one-third of its staff. With the loss of so many came an accompanying loss of institutional and expert knowledge, loss of labor, loss of morale, and loss of control. As managers their task was clear but daunting: The Indiana State University Library needed to strategically maximize the effectiveness of a major workforce reduction and squeeze as much as possible out of a flat budget, while redefining itself as a 21st century academic library. Changing circumstances influenced these two managers to open up space for power and responsibility to flow fluidly between their departments. The resultant new workflows grew new working relationships and helped to bring the library in line with institutional goals and initiatives.

A Tale of Two Departments

Who Moved My Cheese? is an allegory about people in transition with the cheese serving as a metaphor for whatever it is that makes them happy. Spencer Johnson highlighted the inevitability of change referring to this allegory. This short story has been successfully used as an aid in understanding people's varied responses to crisis situations. In the early spring of 2010 Indiana State University (ISU) witnessed one of the greatest workforce crises of its long history, a time when everyone's cheese was being radically shifted. Due to cutbacks in state funding the university experienced massive staff reductions while, at the same time, was stressed to remain competitive in a tight financial market. With less staff the manager of technical services and the manager of access services, who is currently serving as acting associate dean, decided to openly share their leadership roles with the people in their respective departments for the purposes of collaborating interdepartmentally in identifying, testing, and adopting new workflows that brought the library in line with institutional goals and initiatives. What resulted is "new cheese" in the form of improved morale, streamlined workflows, more fluid professional identities, quicker response times to patron requests, and an emergent no-blame atmosphere. As these managers examine their history, Johnson's allegory is employed to describe people's reactions to change, while Robert Greenleaf's concept of servant leadership is used to illustrate the two department heads' shared approach in dealing with this workforce crisis.

The Cheese Has Moved

Johnson's Allegory

Who Moved My Cheese? is a short story of four characters that have markedly different reactions to change. Two people, Hem and Haw, and two mice, Sniff and Scurry, live in a maze and collect their daily cheese from the same feeding station. The mice treat the cheese as food, but the people have built their lives around the cheese, treating it as an inexhaustible resource that they are entitled to have. When the cheese runs out the mice accept the change, put on their sneakers, and search for cheese elsewhere. They quickly find a new feeding station in another part of the maze.

But the reaction of the people is problematical. Hem and Haw are stunned and sorely grieved by the loss of the cheese. Hem is incapacitated by rage and feelings of betrayal. He chooses to remain at the old, bankrupt feeding station. But Haw eventually realizes that survival dictates positive action and so he leaves his immobilized companion behind in pursuit of “new cheese”. He soon finds the same new feeding station that the mice had discovered long ago. Haw is empowered by this experience. As he traverses the maze he realizes that change is a part of life. He is delighted to learn that the new cheese, in his opinion, is better than the original cheese. He muses of his friend’s inability to accept change and scribbles what he has learned on its walls for the benefit of his former companion, whom he hopes will someday follow him. Haw’s final graffito summarizes Johnson’s thesis: “Enjoy Change! Savor The Adventure And Enjoy The Taste Of New Cheese!” (Johnson 74).

As a popular and influential book, *Who Moved My Cheese?* has come under fire by some as trite and simplistic (Brown; Gordon). But it has also been used successfully to help others understand and manage uncertainty (Enriquez-Collins; Goch; Larson; Lomas; Raynor). The maze can signify any environment, but has often been used to illustrate the working world. The cheese represents anything that makes people in that environment happy – be it money, social position, appreciation, knowledge, routine, or a host of other perceived rewards and sources of sustenance. As the four characters in the story collect their daily cheese Johnson never explains its source or why it eventually runs out. What is important is that change occurs. The two mice typify, among other things, uncomplicated acceptance to vicissitude. As for the little people: Hem represents a person who has dug in his heels and refuses to change, even in the face of eventual starvation. Hem is the person who initially resists the change, but journeys to gradual acceptance and liberation. At any given time, managers and staff are capable of choosing any of these three reactions when responding to events outside of their control.

The Maze

Before describing how the cheese was moved at Indiana State University, it is helpful to describe the environment: Established in 1865 Indiana State is a public, Carnegie doctoral/research institution accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Since 2006 the University has been honored with a special Carnegie classification for Curricular Engagement and Outreach and Partnerships in recognition of the university’s strong commitment to community engagement. Total enrollment in 2009 was 10,534. At this time there were 23 exempt and 36

nonexempt workers employed in the ISU Library. Located on an urban campus in Terre Haute, Indiana, the library housed more than 1.3 million items and served the university, and the local residential and business communities. In 2009 the library hired a consultant, who met with a wide variety of Indiana State stakeholders, to develop a strategic plan. One important component of this plan was to, “Increase community partnerships to raise visibility of library services, sharing expertise and mutual goals” (*Cunningham Memorial Library 2*). Library personnel enthusiastically embraced many initiatives aligned with the plan. One of these initiatives, the formation of a local consortium, grew out of the university’s commitment to community engagement.

Since 1985 the three institutions of higher learning in the Terre Haute area, ISU, Saint Mary-of-the-Woods College, and the Rose-Hulman Institute of Technology, had shared an online catalog. But in 2009 the Library Consortium of Vigo County (LCVC) was formed and counted in its membership these three academic libraries plus the one nonacademic library located in downtown Terre Haute, the Vigo County Public Library. This would be the first academic library consortium in the state of Indiana, and one of only a few in the country, that included a public library. (Breeding) The LCVC was created to actively support community engagement through collaboration and shared resources.

As its first charge the LCVC selected an Integrated Library System (ILS) that could be shared by all four members of the consortium. From 1998 onward ISU, Saint Mary-of-the-Woods, and Rose-Hulman had been sharing the Voyager cataloging system developed by Endeavor Information Systems, a company that later merged with Ex Libris Group. But now the city’s public library was involved and after consulting with several vendors the LCVC chose the Millennium cataloging system, and the Encore discovery platform from Innovative Interfaces to be the new ILS for the consortium. The four partners in the consortium signed a memorandum of understanding to that effect in January 2010. Certainly a new ILS can be defined as moving cheese, since system migration is a large and complex project affecting every department in the library, and every library in the consortium. To complicate things further, since this ambitious project introduced an urban, public library into a previously academic-only group, the academic consortium partners had to adapt to a different set of best practices and patron needs. But an even bigger cheese-shift than system migration or strategic planning was soon to affect ISU and the entire Terre Haute community.

Someone Moved the Cheese

The beginning of 2010 was a difficult period in ISU’s history. All those residing in Indiana with jobs funded by state tax dollars rang in the New Year knowing that difficult times may lay ahead. In December 2009 then-time governor, Mitch Daniels, announced that state revenues for November were 144 million below projections, resulting in a 2009 year-end shortfall of \$475 million. The governor’s plan to address this crisis was far-reaching and complex, but for Indiana colleges and universities it meant a \$150 million reduction in the appropriation to higher education from January 2010 to June 2011 (“Governor Takes More Action”).

With reduced funding came cutbacks in the form of layoffs and early retirements at ISU. At an open meeting in February 2010, President Bradley announced that the university would

eliminate one hundred and eight positions, which comprised seventy-eight nonexempt and thirty exempt positions. The university also planned to offer early retirement incentives to all employees who qualified as a method of offsetting some of the planned layoffs. ISU was attempting a recovery from the loss of one hundred positions made in 2008/2009 as a result of state budget cuts (“Staggering Blow”). This new wave of staff layoffs equated to a massive reduction of the workforce in a relatively short period of time. In 2010 university administration decided to not cut the number of tenure and tenure-track lines to support the institution’s ability to teach classes. Because of this decision the university was publically criticized for saving faculty lines at the expense of the lower-paid support staff. But the president responded that these cuts were to include all levels of the workforce, from the grounds crew to administration (Loughlin). However, the perception of faculty privilege was to politically affect the library workforce since ISU librarians have faculty status and enjoy the protection of tenure not shared by library nonexempt staff.

If ever there was a real-world example of the cheese being moved, this was it. By April of 2010 roughly one-third of the university workforce was gone. The library experienced a thirty-two percent reduction in its workforce as twelve employees retired, taking three hundred and eight years of combined institutional and expert experience with them. A further six library employees were let go, and one employee was transferred outside of the library. ISU had a long and well-earned reputation for being a stable employer in the tight-knit community of Terre Haute. This was a crisis that shocked and saddened the entire community. During this time there were many editorials about loss in the local newspaper:

Indiana State’s [ISU] future is closely tied to this community’s future. Its successes are community successes. Its troubles are community troubles. The pain the university is feeling over these job losses is shared throughout the city, county and west-central Indiana. (Staggering Blow)

But there was little time to grieve. The “survivors” had to quickly work at finding ways to shore up the gaping holes in experience and labor resulting from these staff reductions, while working towards keeping the university competitive and responsive to future trends in higher education. For the ISU library this meant focusing on the strategic plan. In addition to the smaller workforce, the library’s budget was frozen. Yet the plan for system migration advanced so that by August 16, 2010 all consortium libraries closed for the day to migrate to the new ILS. When they opened their doors the following day, all four libraries provided the Terre Haute community with access to over 1.8 million items.

Long Live the Cheese

Servant Leadership with a Slice of Cheese

So what did the authors do to forward ISU’s mission, restore order, and help coworkers find new cheese in response to the events of 2010? The first thing they did was to *publically* recognize the uncomfortable fact that people were frightened and hurting due to the combined stress of the staffing shortfall, the introduction of a public library into a previous academic-only consortium, and the new ILS. Their response — to collaborate — was something that other departments in the library were also doing. For instance, out of necessity technical services set up interdepartmental workflows with a librarian in the

reference department to build and maintain the library's popular browsing collection (Blevens) The collaboration between technical services and access services was unique in that it involved a host of people operating in a fluid environment in which emergent leadership was encouraged.

To understand why these managers collaborated in opening up room for others to lead, it is helpful to explain their management philosophy. Both are servant leaders. This commonality afforded them strong affinity in facing the workforce crises that lay before them and their coworkers. The term "servant leadership" first appeared in an essay written by Robert Greenleaf and published in 1970. Greenleaf, a Terre Haute native, was a management researcher at AT&T and held visiting appointments at MIT and Harvard. In 1964 he founded the Center for Applied Ethics, now called The Greenleaf Center for Servant Leadership. (Frick) There are many flavors of servant leadership but all depart from traditional, top-down management by espousing the merits of leaders who actively practice listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community (Spears 3-6). Servant leadership places individual dignity and self-realization over undiscerning compliance to authority (32).

Greenleaf was ahead of his time, but current research has caught up with him. Kouzes and Posner have spent over thirty years asking people from a host of countries, including the United States, how they wish their leaders to behave. They have distilled their collected data into four top characteristics of effective leadership, which has remained constant over decades of research. These universal characteristics are: honest, forward-looking, inspiring, and competent (12). Such attributes mesh well with Greenleaf's concept of enlightened, empathetic management; Kouzes and Posner stress that leaders need to be credible and authentic but not domineering, reinforcing Greenleaf's model of servant leadership. Kouzes and Posner write:

The old organizational hierarchy just can't generate the kind of commitment that's required in our global society. This isn't a call for open elections inside organizations. But managers should not kid themselves. People do vote – with their energy, with their dedication, with their loyalty, with their talent, with their actions. Don't you put forth higher-quality effort when you believe that the people leading you are there to serve your needs and not just their own interests? (2)

In stressing that effective leadership isn't something that is taken, but rather granted Spears explains that servant leadership is "turning the hierarchical pyramid upside down" to create a better society (17). But does this type of shared leadership dilute accountability? If power is shared, everyone is responsible; if everyone is responsible, then is no one responsible? Kouzes and Posner answer this question by revealing that in their research the most effective leaders do seek consensus, but also communicate their standards and core values to their constituents. They then hold themselves accountable to these same standards and "...when their leadership service is inadequate, they make amends for it, just as they would expect other to do" (39). This view can seem risky to many managers who fear a loss of control by admitting mistakes, but such behavior can strengthen trust and enhance the leader's credibility (381). Because of their management philosophy the authors believed that sharing power among the group did not necessarily diminish their control, and that a manager can still maintain vision and accountability for the department when others lead. As servant

leaders they also demanded of themselves a high level of sensitivity to the wide array of reactions from their coworkers. In other words, they greatly appreciated the people who behaved like Sniff and Scurry, and were willing to be patient with the Hems and Haws in their respective departments.

Finding New Cheese

In 2009 technical services comprised acquisitions, cataloging, processing, and government documents. Access services was made up of circulation, stacks maintenance, reserves, interlibrary loan, and evening, paraprofessional reference service. The stress of a reduced workforce created an environment encouraging both intradepartmental and interdepartmental cross-training. The staff quickly realized that in order to keep the library running, they had to learn something new. In technical services, acquisitions staff did not catalog prior to system migration. Likewise, cataloging staff did not keep up with acquisitions functions. There had been no need to do so. In Voyager the acquisitions and cataloging modules are separate. But in the new Millennium system this was not the case, and so cross-training was necessary. In similar fashion the staff in access services were stressed to redefine themselves as they had to cover the hours of public service with less people, and so they too began to cross-train within the department.

While intradepartmental cross-training was handled informally, cross-training between departments was either negotiated between department managers or involved input from library administration. Two of the technical services staff, the government documents clerk and an acquisitions clerk, began working a few hours a week at the circulation desk, while the circulation night manager began cataloging during quiet times in the evening. Using the procedures created to train the acquisitions staff, the catalogers were primed to teach the circulation night supervisor and other circulation staff how to take care of minor cataloging issues that were discovered at the circulation desk, without having to consult with the overtaxed technical services staff. There were well over a hundred combined workflows and policies that had to be assessed, reinterpreted, redefined, negotiated, and created for technical services and access services as a result of the system migration. These workflows and procedures were sometimes internal to ISU, and at other times shared among all members of the new LCVC consortium.

As servant leaders, the authors actively searched for opportunities that encouraged honest but respectful communication and healing. They periodically discussed with each other what they could do to offer their staff not just the *feeling* of control but instead, a level of authentic autonomy. This meant that they, as managers, had to sometimes tolerate being outside their own comfort zone. Eventually they came to set emergent ground rules. First, they encouraged staff to bypass them to problem solve. Their staff could directly communicate with anyone in the library and university, as well as other consortium members to gain information and test ideas. The stipulation that the managers set on this process was that the staff come to them for final approval after experimentation and testing.

But before making a decision on final approval the authors would ask staff to bring the new workflow, perspective, technique, policy, or procedure to the rest of the staff to be vetted and discussed by all. These discussions happened organically. There was no combined technical services/access services committee or general meeting. Instead, each department talked about

the new ideas at their respective department meetings and then shared the information and opinions informally among coworkers. When a new workflow or policy was created, one of the managers would publicize this via email. This process was messy. Instead of organized, prescheduled meetings with tidy agendas and careful discussion many of the best ideas were vetted by staff bouncing back and forth between departments like excited rabbits. For the authors it sometimes got noisy; it often felt confusing. But encouraging staff to visit each other in-person and at-will made them masters of their fate at a time when they were genuinely frightened and hurting. It also afforded them opportunities to develop tacit knowledge of their coworkers' job functions and frustrations. This open process also helped the staff to appreciate their own expertise vis-à-vis that of the librarians'. The authors advocated for their non-faculty staff to make presentations at professional conferences with the financial and temporal support of library administration. Since the staff knew that librarians had been protected by their faculty status from the recent layoffs, they felt understandably vulnerable and resentful that they were not members of this privileged class. Even though money was tight, the authors knew that it was very important for them, the library faculty, and the university to support the conference attendance of the staff.

Unpacking the Cheese

The authors' speculate that one reason why some middle managers resist granting autonomy to their direct reports is because they worry about losing control of their department. This is a legitimate concern. However, the autonomy described here is more about problem-solving and communication. The authors enthusiastically and cheerfully assert that a person can only have total over one's own psyche. On difficult days, even this type of sovereignty can be an illusion. However, besides maintaining final approval of implementing new ideas the authors still attended to sundries such as approving leave time, managing money, and setting limits on overtime and schedules. More importantly, the authors openly took responsibility for problems arising from the work in their departments, and also were quite vocal about admitting to mistakes they personally made. To do otherwise would have eroded trust with their staff.

As for the staff who chose to cope with their frustration by resisting change, the authors first tried to distinguish between the Hems and Haws, and sometimes discovered mice. They asked themselves, "Is this employee resisting because s/he needs more time to feel comfortable with the change? Is this employee a hostile saboteur? Is this employee not resisting all, but seeing something that the rest of us have yet to appreciate?" There is no formula for dealing with people in such situations because the variety of personalities and circumstance are too great. However, the authors were guided by servant leadership principles as articulated by Green and Miller describing the shutdown of the Dayton Brake Assembly Operations in the wake of the Delphi Bankruptcy in 2006. The principles below come directly from their narrative:

1. Listen, don't talk. "As leaders, we realized that our first priority was to listen. Not talk, not tell, but listen. We let people ask questions and tell us their fears." (16)
2. Ask employees what they need. "Servant-leaders identify and meet the needs of others. They start by asking: what do you need?" (17)

3. Set aside time every week for foresight and planning. “Greenleaf said that foresight is the central ethic of leadership. Foresight is not about specific predictions, but about understanding underlying trends and likely outcomes.” (19)
4. Ask if those served grow as persons. “In *The Servant as Leader*, Greenleaf said that the servant-leader makes sure that other people’s highest priority needs are being served.” (20).

The Big Cheese

Perhaps the greatest challenge the authors faced in dealing with the events of 2010 was the adoption of humility. Humility is not lack of confidence, but a way of looking past situations and personalities to see into the heart of a matter. Some of the best ideas for managing new workflows and creating new policies originated from coworkers who were acting out in hostile ways. Yet the authors strived to listen to all viewpoints. Managers have access to privileged information. They are privy to impromptu conversations with higher-ups that their staff do not enjoy. Although their jobs might burden them with added responsibility, they often benefit from institutional perks not shared by all. In consequence, they can unconsciously believe the myth of their own superiority. This is a cheese-bank that serves no one, least of all themselves. The authors’ best nutshell advice to others in managing people during times of great upheaval is to quote Henry James: “Three things in human life are important: the first is to be kind; the second is to be kind; and the third is to be kind” (Ratcliffe).

Works Cited

- Blevens, Cheryl. “Streamlined Workflow + McNaughton = Success.” *Brick and Click: An Academic Library Symposium October 26, 2012*. Eds. Frank Baudino and Carolyn Johnson. Maryville, MO: Northwest State University, 2012. 106-109. Print.
- Breeding, Marshall. “Academic and Public Libraries in Indiana will Implement Shared Millennium ILS.” *www.librarytechnology.org*. Library Technology Guides. 29Jan. 2010. Web. 27 May 2014. <<http://www.librarytechnology.org/lgt-displaytext.pl?RC=14499>>.
- Brown, Megan. "Survival at Work: Flexibility and Adaptability in American Corporate Culture." *Cultural Studies* 17.5 (2003): 713-733. *Academic Search Complete*. Web. 26 May 2014.
- “Cunningham Memorial Library Strategic Plan. June 2, 2010.” *library.indstate.edu*. Indiana State University Library, 2 June, 2010. Web. 26 May 2014. <http://library.indstate.edu/about/docs/Strategic_Plan_Cunningham_Memorial_Library.pdf>.
- Enriquez-Collins, Alicia. "An Evolution Of Environmental Health: NEHA Adapts and Embraces Change." *Journal of Environmental Health* 76.2 (2013): 6-7. *Academic Search Complete*. Web. 26 May 2014.
- Frick, Don. “Robert K. Greenleaf Biography.” *www.greenleaf.org*. Robert K. Greenleaf Center for Servant Leadership, n.d. Web. 29 May 2014. <<https://greenleaf.org/about-us/about-robert-k-greenleaf/>>.

- Green, Tom, and Mary Miller. *Servant Leadership in Hard Times: The Closing of the Delphi Brake Assembly Operations*. Westfield: The Greenleaf Center for Servant Leadership, 2012. Print.
- Greenleaf, Robert. *The Servant as Leader*. Indianapolis: Robert K. Greenleaf Center, 1991. Print.
- Goch, Lynna. "Agents of Change." *Best's Review* 101.7 (2000): 64. *MasterFILE Premier*. Web. 26 May 2014.
- Gordon, Jack. "Why I Don't Like Cheese." *Training* 6 Mar. 2006. *MasterFILE Premier*. Web. 26 May 2014.
- "Governor Takes More Action to Offset Revenue Shortfalls." *IN.gov*. IN.gov, 4 Dec. 2009. Web. 25 May 2014. <http://www.in.gov/portal/news_events/44495.htm>.
- Johnson, Spencer. *Who Moved My Cheese?* New York: Putnam, 1998. Print.
- Kouzes, James, and Barry Posner. *Credibility: How Leaders Gain and Lose It, Why People Demand It*. 2nd ed. San Francisco: Jossey-Bass, 2011. Kindle file.
- Larson, K. L. "Interpreting Causes of Personal Stress with Cheese." *Journal of School Health* 78.3 (2008): 175-178. Print.
- Lomas, Gabriel I. "Dealing with Change." *Journal of the American Deafness & Rehabilitation Association (JADARA)* 2010: 198. *Academic Search Complete*. Web. 26 May 2014.
- Loughlin, Sue. "Indiana State President Answers Questions on Cutbacks: School in Process of Shedding about 108 Positions." *Tribune-Star* [Terre Haute] 5 Feb. 2010. *LexisNexis Academic*. Web. 25 May 2014.
- Ratcliffe, Susan, ed. *Oxford Essential Quotations*. Oxford: Oxford University Press, 2012. *Oxford Reference*. Web. 25 June 2014.
- Raynor, Michael E. "Disappointed by the Gurus?" *Conference Board Review* 45.3 (2008): 65. *MasterFILE Premier*. Web. 26 May 2014.
- Spears, Larry, ed. *Insights on Leadership: Service, Stewardship, Spirit, and Servant-Leadership*. New York: Wiley, 1998. Print.
- Spears, Larry, and Michelle Lawrence, eds. *Practicing Servant Leadership: Succeeding through Trust, Bravery, and Forgiveness*. San Francisco: Jossey-Bass, 2004. Print.
- "Staggering Blow to ISU, But Progress Can Proceed: Despite Budget Woes, Job Losses, University Can Remain Strong." *Tribune-Star* [Terre Haute] 13 Feb. 2010. *LexisNexis Academic*. Web. 1 June 2014.

Patron Driven Acquisitions for Collection Development

David L. Alexander
Digital Access Manager & Assistant to the Dean of Libraries
University of South Dakota

Kathleen A. McElhinney
Metadata / Cataloging Librarian & Head, Technical Services
University of South Dakota

Catherine Paltz
Technical Services Manager
University of South Dakota

Abstract

The University Libraries at the University of South Dakota conducted two pilot projects for patron driven acquisitions. One project involved interlibrary loan staff monitoring interlibrary loan requests for books and notifying the appropriate subject liaison when recently published books were requested in their areas. The other project loaded records of eBooks available for purchase via Yankee Book Peddler (YBP) into the online catalog. This provided seamless access from the patron's point of view to materials that were either leased or purchased based on the trigger when the eBook was actually used. This paper will discuss what the University Libraries hoped to achieve through these projects. This discussion will touch on what factors influenced the implementations at the University of South, the conclusion from an analysis after the first year of the projects, and what the University Libraries plan for the next steps as they move beyond the pilot phase.

Introduction

The University Libraries (UL) at the University of South Dakota, like many other libraries around the country, has explored and begun to utilize patron driven acquisitions in two ways; acquisition triggered by interlibrary loan (ILL) requests for recent items and acquisition triggered through bibliographic records loaded into the online catalog. To help avoid confusion, interlibrary loan triggered acquisitions are referred to as Purchase on Demand (PoD) and catalog triggered acquisitions as Demand Driven Acquisitions (DDA). ILL Purchase on Demand was piloted from April 2012 to December 2012 and Demand Driven Acquisition through our library catalog started (first DDA records loaded) in January 2013. Evaluation and revision of both programs continues. The PoD pilot was a direct result of attending a presentation by librarians from Concordia College at the Ex Libris Upper Midwest User Group Meeting in October 2011. DDA was driven by Anne Moore, Dean of Libraries at the time, as a way to move the library towards eBook acquisitions.

As libraries move towards patron driven acquisition programs the local context influences the implementation decisions. Before covering the implementation of our two programs, here is some brief information on our local context.

Local Context

The University of South Dakota (USD) is a public university with a student body of roughly 10,000 students. It is designated as the state's only liberal arts institution and is also home to the state's medical and law schools. Approximately three fourths of the students are undergraduates, studying in 205 undergraduate programs, and one fourth of the students are graduate students, studying in 65 graduate programs. The University employs over 400 faculty members and over 800 staff, with the vast majority of faculty engaged in scholarly research as part of their assigned duties.

The University Libraries was formed in the fall of 2008 when the I.D. Weeks Library was merged with the Lommen Health Sciences Library, which had been located on the first floor of the Weeks building since May of 1995. The University Libraries also took over the administration of the Wegner Health Science and Information Center, but it remains a distinct entity and has not participated in the patron driven acquisitions programs.

Purchase on Demand via Interlibrary Loan

ILLiad is the primary interlibrary loan system used at the University Libraries. Based on Concordia College's example of using Amazon Prime to purchase an item instead of filling the ILL request as normal, PoD was initially investigated as an alternative to fulfilling select ILL requests. The date of publication was the primary criteria used for determining if a requested book was eligible for PoD, with only those published in the current or previous year being passed on to the subject liaison. A template was created in ILLiad that automatically populated the email message with the title, author, OCLC and ISBN numbers, publication date, edition, and publisher details. The liaison was to determine within 24 hours whether or not they wanted the item purchased with the department budget under their control. The acquisitions department was to be notified by email of the liaison's decision. If a print book was purchased and arrived before the requested ILL book, minimum-level processing and cataloging (including marking, barcode, magnetic strips) were to be done with the book then delivered to the ILL department. ILL staff would then place the book at the circulation desk for pick-up and notify the patron.

Multiple vendors were considered for rapid purchase and delivery, but because UL could not use a credit card for purchases and liaisons wanted to approve all purchases, satisfactory turnaround time was impossible to achieve. The pilot project proceeded with processing of the ILL request as normal, but still notifying the appropriate subject liaison to see if they wanted to purchase the requested book for our collection.

During the pilot period 18 email notifications were sent to subject liaisons. One of the first issues encountered was that the departmental affiliation of the requestor, which was registered in ILLiad, did not always match the subject matter of the item being requested. This was addressed by asking the ILL staff to determine, as best they could from the title, the department that best matched the subject of the requested item. Emails have since been based on this determination rather than the registered department of the requestor. This has largely eliminated items sent to liaisons that did not fall within their assigned selection areas. Another initial issue was that the liaison sometimes did not respond within the 24-hour period or did not send their response to the acquisitions department. The latter was a result of

the notification email being sent from the Interlibrary Loan department so if liaisons hit the “Reply” button instead of “Reply All” the email went to the wrong place. After further instruction, both of these issues have largely resolved themselves.

Given the ordering constraints imposed by UL’s ordering processes, the time needed to get purchase approval, order, and receive a title was generally too long to meet the requirements of ILL. However, use of PoD as a collection development tool continues. In the period from January 2013 through February 2014, PoD emails were sent to liaisons 43 times and resulted in 30 books purchased.

Demand Driven Acquisitions via the Online Catalog

Prior to fiscal year 2008, the budget for book acquisitions was distributed between the UL and academic departments. In the fall semester of 2008 the budget was consolidated under the full control of the UL. Titles for purchase are selected/approved by subject liaison librarians with varying degrees of faculty input from the departments the liaisons serve. The UL has been using the Yankee Book Peddler (YBP) GOBI system as the primary source for placing book orders since fall of 2010, after setting up the initial new titles notification profile based on Library of Congress Classification in July 2010. The Dean of Libraries began discussing the possibility of implementing DDA via YBP in March, 2011, and in August of 2012 a proposal was developed.

From initial discussions with ebrary and EBL there was interest in DDA as a way to purchase materials that would actually be used. The Dean was particularly interested in this aspect in terms of acquiring more resources in support of undergraduate research. As described in the UL’s DDA setup proposal, the purpose of DDA is to supplement the UL’s existing collection development model by providing additional access to resources. The setup proposal stated “The DDA collection will generally be geared towards undergraduate students, with graduate level materials included in selected areas.” Interest spiked when these aggregators partnered with YBP, which provided the additional advantages of some automated duplication control and no need to set up a separate, less precise profile with the aggregator, as well as eventually being able to include more than one aggregator in our DDA setup.

Ebrary was selected to be the first aggregator set up with YBP for DDA because of their more generous free-browsing period before a short-term loan was triggered. EBL was to be added later as a secondary provider for titles not available through ebrary, and to allow inclusion of some higher-priced items for certain disciplines; however, this was put on hold when EBL’s merger with ebrary was announced. It was decided for the pilot that when available 1-day short-term loans (STLs) would be used with purchase being triggered on the 4th use, but that we would also allow discovery records for titles where publishers only permitted purchase on first use DDA.

The initial DDA selection profile almost mirrored the profile already in use with YBP for new title alerts, which was reviewed for corrections before starting DDA. A few exclusions were made to account for items for which liaison purchase was preferred, such as reference-type materials, and textbooks and professional-level titles for many disciplines. Also, our separate Health Sciences profile was not included in the pilot, but is in the process of being

added now. To be included in the initial “discovery pool” of DDA titles loaded into the catalog at the end of 2012, a title needed to meet three additional criteria:

- published within the last three years (2010 or newer; changed to “current and prior publication year” after review of the retrospective file)
- not previously purchased from YBP in any format
- have an ebrary Single User Purchase Option (SUPO) list price less than the \$200 (changed to \$250 before the discovery pool was loaded)

UL is a member of the South Dakota Library Network (SDLN) and as such uses Aleph version 20 from Ex Libris as its ILS system. The system is administered by network administrators at SDLN, with localized setup for the member libraries. In January 2013 the first load of 18,000 titles was added in phases to the catalog by SDLN staff, with weekly loads thereafter. By the end of 2013 the number of DDA records in the catalog had reached 27,697. ILS charges are distributed among members based upon number of records in the system, so adding this many records in one year caused a significant increase in our ILS costs.

After the initial load, DDA records began to appear in search results alongside records for titles owned by UL. The only indications in a record that the title is part of the DDA program is a note containing 'YBPDDA' along with the load date, and a note accompanying the URL address. Most users do not know they are using DDA titles rather than titles owned by UL. The DDA program was not advertised as a means to minimize the number of purchases and to help prevent gamesmanship that might occur with the realization that DDA funds are not tied to a specific department. If someone asked, the DDA program was explained, but only a few faculty members have asked.

For most publishers, short-term loans are triggered by use beyond the free browse period. When short-term use is allowed and triggered, 10-15% of the purchase price is charged, with the purchase triggered on the fourth use. Books purchased in this way therefore cost the library 130-145% of the normal cost.

Some publishers, however, do not allow short-term loans, so purchases are triggered at first use beyond the free browse period. Though they do not incur the extra rental cost of the short term loans, purchasing after a single use eats up the DDA budget much faster. Plus, you are less sure that the titles are actually being used, since they need be accessed only once to be purchased.

A separate budget was set aside to pay for DDA purchases, with an initial amount of \$20,000. In 2013, 130 titles were purchased at a cost of \$9799. Of these, 14 title purchases were triggered by short-term loans, while the rest were first-use purchases. There were 637 additional STLs of 515 titles with a rental cost of \$6839. Of these, there are 20 titles where the next use will trigger a purchase.

Purchases have shown a wide dispersal across discipline areas, with English being the only area that saw slightly more usage than other areas.

It should be noted that DDA titles still appear in YBP's GOBI system for possible purchase by liaisons, in all formats offered by the publisher. When a liaison selects a DDA title from within YBP for purchase, the item is purchased from the liaison's budget area rather than the DDA budget. There were 97 DDA overrides in 2013.

If the DDA item is selected for purchase by a liaison in electronic format, the DDA record is then replaced in the catalog with the record for the owned title. If a liaison purchases a print copy of a title in the DDA program, the DDA record remains in the catalog. Removing the DDA record after the purchase of print was considered, but it was decided not to adjust our procedures for now as this may give us some comparison data regarding preference between electronic and print formats.

DDA Surprises, Advantages, and Downside

One of the surprises that came up after several months of weekly uploads is the large number of DDA titles that appear on the first page of some search results. Our search results are listed in reverse chronological order, and sometimes the DDA titles push the owned titles off the first page of results. In some areas this lack of owned resources suggests gaps in our recent acquisitions, while in others it simply reflects the amount of scholarship in this area. For example, a subject search for 'Georg Hegel' returns all DDA titles on the first search results screen. But UL has an excellent selection of Hegel scholarship; there was simply a tremendous amount of critical scholarship published in 2013. Similarly, at the end of 2013, general searches for such terms as 'mathematics' and 'quantum mechanics' also returned a first screen of all DDA results. However, purchases this spring have led to some owned titles appearing in these search results.

Another surprise encountered was several publishers removing a significant number of titles from the DDA program. Thus, Technical Services staff members have had to manually delete each of these DDA records from the catalog. Making the process more time consuming is that notification comes via a monthly list from the eBook vendor, which contains only the vendor number and the title. Since the vendor number is not recorded in an indexed field of the record, no batch delete is possible. No reason or warning was given for these DDA deletes, so there is no guarantee this will not continue to happen. Removing publishers from the DDA program that demonstrate a tendency to pull their titles out of the program was considered, but the primary offender to date has been Oxford University Press, and the subject liaisons have deemed it too important a publisher to remove from the DDA program.

The major advantages of DDA have proved to be access to a larger range of titles than UL could ever afford to purchase, thus supplementing the resources available to undergraduate students and relieving ILL of the burden of tracking down resources. Also, items being selected are actually wanted by library patrons and therefore are being used, at least to the point where purchases are triggered. Of the 130 titles purchased, 101 of them have been used at least 1 time post-purchase as of the end of 2013.

Since DDA titles are eBooks, the benefits described by Cramer (87-88) are also benefits to the DDA program. Namely, 24/7 access to the books (not restricted to the hours UL is open), immediate off-campus access, full-text searching that makes books more useful to

researchers that have a specific topic covered within a book that may not have warranted traditional subject cataloging, no lost books, no shelf space requirements and no costs associated with shelving print books, multiple simultaneous users (sometimes, depending on license agreement), easier e-Reserves due to the removal of the need for scanning, and immediate acquisition and use.

The downside of DDA (Cramer 88) includes additional processing steps (load workflow for adding DDA catalog records, both initial and supplemental), changes in purchasing workflow, and the need for a deletion workflow to remove DDA records. The disadvantages of eBooks in general naturally carried over as well, including user preference for print, lack of standardization in readers, platforms, interfaces, terms, triggers, etc., limits on printing, copying, and pasting, and potentially added work for digital rights management related to these, restrictions on interlibrary loan, limitations in terms of content (not everything is available in eBook format), and the necessity to have contracts established with multiple eBook providers.

PoD and DDA Going Forward

Overall, the pilot programs were deemed successful and are continuing into 2014. The only change under consideration for PoD is whether or not to use a report for this purpose rather than having ILL staff identify requests for recently published books as they come in. This would take the consideration of suitability for PoD out of the day-to-day processing of interlibrary loan requests and make it more of an administrative function conducted on a periodic basis. The evaluation of the DDA program continues as more data from its use is gathered. Expected changes include adding a profile for the National Library of Medicine classification schedule this year, to take into account our extensive health science programs. With several new eBook vendors starting to get into DDA, additional vendors may also be added to the program.

Our primary concern going forward is the budget and the rate at which DDA purchases are made. Ways to slow the purchase rate have been considered and some changes will be made accordingly.

The first change to be made in the summer of 2014 is to remove the 2010 records from the DDA program, so the DDA program remains at 3 years of records. Reducing loaded records to a two year period was an option considered, but not chosen at this time, as it would cause a dramatic reduction in the number of titles loaded and possibly remove titles that have STL use, but have yet to trigger the purchase. Should the need to dramatically slow the rate of usage arise, this remains a valid option.

The second change to be made this summer is to review the DDA profile with an eye to narrowing it. Since the program is designed primarily to be a supplement to undergraduate education, areas where the university does not have graduate programs (e.g., philosophy), or does not teach at all (e.g., engineering), will be reduced or eliminated from the profile. In other areas, topics that are graduate-only may be eliminated, such as topology in mathematics. YBP's properties and other content-related facets will also be used to further reduce the size of the record set. Since each discipline is different, the subject liaisons will be asked to determine what strategy is most appropriate for their subject area(s).

Another option suggested for consideration was to remove the first-use purchase titles from the DDA pool; however, additional analysis will need to be performed to determine what impact this would have on resources for certain disciplines.

Works Cited

- Cramer, Carol Joyner. "All about Demand Driven Acquisitions." *The Serials Librarian* 65.1 (2013): 87-97. Print.
- Downey, Kay. "Technical Services Workflow for Book Jobber-Mediated Demand Driven ebook Acquisitions." *Technical Services Quarterly* 31.1 (2014): 1-12. Print.
- Draper, Daniel C. "Managing Patron-Driven Acquisitions (PDA) Records in a Multiple Model Environment." *Technical Services Quarterly* 30.2 (2013): 153-165. Print.
- Emery, Jill. "The Demand Driven Acquisitions Pilot Project by the Orbis Cascade Alliance: An Interview with Members of the Demand Driven Acquisitions Implementation Team." *Serials Review* 38.2 (2012): 132-136. Print.
- Fischer, Karen S. "Give 'Em What They Want: A One-Year Study of Unmediated Patron-Driven Acquisition of e-Books." *College & Research Libraries* 73.5 (2012): 469-492. Print.
- Swords, David. "Elements of a Demand-Driven Model". *Patron-driven Acquisitions: History and Best Practices*. Ed. David A. Swords. Boston: De Gruyter, 2011. 169-187. Print.
- Waller, Jeffrey H. "Undergrads as Selectors: Assessing PDA at a Liberal Arts College." *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*. 23.3 (2013): 127-148. Print.

Library Social Media: What Do Students Want?

Angie Brunk
Reference and Instruction Librarian
Emporia State University
Emporia, KS

Abstract

Librarians know we should be on social media but what impact can and do we really have? What do students want from their academic library's social media? Previous research suggests student ambivalence about official social media. Some suggest students think of social media as a place for fun, not work or school. Students at Emporia State University were surveyed to determine their attitudes towards library social media and what they wanted from the William Allen White library. Survey results were then compared with available data about activity and interest on the library's social media accounts. The survey data and data from library social media accounts were then used to refine social media policy and planning. Available data suggest the Emporia State University Libraries and Archives Facebook page is increasing in number of followers while the Emporia State University page is declining. Students tell us what we are doing right. Discussion of how to use this methodology and questions that yielded the most useful information is also included.

Think About It: Learning Changes the Brain

Edith A. Campbell
Associate Librarian, Public Services Department
Indiana State University

Abstract

In a typical lecture where students retain only 5% of what they hear, one can assume they are not learning. If librarians were to begin to apply brain based learning theory to these instruction sessions, they could make more optimal use of these 50 minute sessions by reducing learner stress, establishing high expectations and maintaining student attention. While brain based theory does not offer prescriptive teaching guidelines, it does combine research from biology, developmental psychology and cognitive neuroscience to help educators (in this instance, librarians are educators) understand how the mind and brain work and how to identify effective instructional strategies. The resulting 50-minute session that models brain based teaching will help participants know how to increase student's retention and improve their academic success.

Introduction

Professional educators know in theory how to teach and as such, the author, a librarian and an educator, should know how to effectively teach information literacy skills to college freshmen. Yet, in transitioning to The Academy, the author dropped any hint of confidence and developed information literacy sessions that were stuffed with stuff. Each session imparted this stuff with sub-standard teaching methods that were couched behind the sharing of objectives and the implication of participation by throwing occasional questions out to the audience. Two years is an adequate amount of time to spend on developing an understanding the workings of an academic librarian and to build the confidence for one to realize that enough of these mini workshops is enough. Similar to those throughout library land, these sessions typically contain enough information to create so much stress in students that they have a negative impact on learners (Mellon 163). Consequently, there is no learning.

Perhaps librarians suppose these are teaching sessions and that learning takes place even though the sessions are often planned without regard to how learning occurs. Teaching and learning can be quite elusive concepts. If one does not learn, there is not teaching. These 50 minute "one shot" sessions are critical for a student's library experience as this initial experience comes to define their expectations for library services and impacts the habits of mind they build toward research. The instruction sessions neglect elements of pedagogy.

The author decided teaching these sessions would become most effective by developing undergraduate sessions based upon brain-based learning strategies. "Brain-based learning builds instruction upon how the human brain operates and how it acquires knowledge. This methodology focuses on the learner as it employs strategies such as problem-based learning and individualized instruction" ("Brain based learning").

Literature Review

Very little literature seems to exist on the topic of brain-based learning in academic library instruction. The monograph *Brain Friendly School Libraries* discusses ways to employ brain theory to enhance the physical elements of the high school library/media center. In 2004, *School Library Media Activities Monthly* ran a seven part series on information literacy teaching techniques that were based in brain theory. Each article in the series presented an overview of a different aspect of research, interpreted findings, provided practical suggestions for incorporating the research into best practices and provided additional sources (Milam 26).

In that same year, Rebecca Jackson examined research on cognitive development and its implications for teaching librarians. Jackson found that students enter the university at various stages of cognitive development and thus vary in their ability to recognize diverse points of view. She found that information literacy standards are often beyond a student's cognitive level, but with well-planned instruction the student are able to progress in their abilities.

Information literacy is “the ability to find, evaluate and use information efficiently, effectively and ethically to answer an information need” (Lanning 2). Randle Gedeon employs Sperry's Split Brain Theory to ground his argument that library instruction tends to favor left-brain learners although good teaching addresses both hemispheres. According to Sperry's theory, the left side of the brain is linear, logical and verbal in thinking, while the right side of the brain is visual, creative and intuitive. The right brain is important in the learning process, as 55% of adults are right-brained. Thus, they are visual thinkers who learn through fantasy and direct experience (Gedeon 262). This suggests the best practices to address the right side in teaching would include metaphors, charts, graphs and mind maps.

Planning

Librarians do not see themselves as teachers yet their role is clearly to educate students regarding information, data and the tools and attitudes necessary to access, retrieve, store and use any. Do pause and take a breath at the immensity of that monumental charge. We not only consider technology tools that enhance and transform ways in which we interact with information, but we must address the convergence of social, cultural and educational theories and practices that take ‘information literacy’ out of the library (Kapitzke 453). Our students have real world needs for the literacies we address along with their academics requisites. We have to become librarian teachers who do in fact educate students beyond bibliographic instruction, beyond searching the library and beyond what the librarian states to be true. Students must learn to think independently, critically and to behave responsibly with information. As independent learners they will need to skillfully and mindfully know where to search and how to use a variety of search tools whether for academic or personal reasons.

And, we really attempt to address all of this in 50-minute sessions that typically are not related to any specific research need. These classes are often crammed with as many bits of information that can be accommodated while skills are addressed in isolation from the students' direct need to use them. Too often, librarians see this as a once in a lifetime opportunity to address as much information as possible. Simply mentioning ways to do

something does not leave any lasting impression on students. As such, this expository method finds no foundation in pedagogy.

Many academic librarians are moving away from addressing ‘information literacy’ to ‘metaliteracy’. ‘Metaliteracy’ is an overarching and self-referential framework that integrates emerging technologies and unifies multiple literacy types (Mackey and Jacobson 62). Young people rely upon technology and social networking to perform many cognitive functions, suggesting a different approach to what and how we teach (Lonka 22). Built upon the framework of information literacy, metaliteracy recognizes the fluidity of information and the need to share and collaborate with it (Mackey and Jacobsen 62). Metacognition is addressed as students learn how they consider information structures, needs and ramifications. Media, visual and digital literacies are addressed as emerging technologies are incorporated into instruction.

Parameters for my university freshman information literacy classes are that they are held over two consecutive 50-minute sessions in the library and occur at random points during Freshman English. It is possible to consult with most English instructors prior to delivery. In order to enhance the search experience of novice researchers, a discovery search layer was added to our repertoire in early 2014. How this tool affects searching across our platforms needs to be assessed so that it can be successfully incorporated into instruction. The specific components of the class remain an individual librarian’s decision at this point in time.

In Theory

Research correlating brain and neurologic function to learning soon reveals an overlap in the development of a relationship between brain function and learning (Sigman et al 499; Willis 699). Tracing the methodology sometimes indicates the lacking of a linear progression. Consequently, it can at times be necessary to consider cognitive research which describes the “...process people use in perceiving reasoning, understanding, and judging their environment and the information they receive...” (“Cognitive”). The brain and mind function in tandem within the learning process, brain-based and cognitive theories are not mutually exclusive in their use. Rather, they are often complimentary.

Rebecca Jackson considered the cognitive studies of Perry, King and Kitchener in institutions of higher education. Perry developed a scale of nine positions to describe intellectual development at the college level. King and Kitchener advance Perry’s work with long-term studies on reflective judgment (how students solve problems with no right or wrong answer) while Baxter Magolda studied assumptions about knowledge and how epistemological assumptions evolve during young adulthood. Magolda found that most students found meaning in “external voices” (Magolda 424) such as parents, teachers and other adults. These findings were quite similar to what Perry called concrete or early multiplistic students who again rely upon authorities for meaning (Jackson 30).

Most are concrete or early multiplistic, terms derived by Perry to categorize students as believing in right/wrong, good/bad and having a difficult time recognizing and thus evaluating different points of view. These students believe Authorities, such as teachers, have all the right answers. If they do not, then they are not credible Authorities.

Jackson found that these students will have difficulty accepting the need for alternative search strategies. They will need help with focusing on their research and even identifying a topic. They can identify types of research but will not know when to use them. Needless to say, they will struggle to evaluate information because each authoritative source will seem acceptable.

Constance Mellon, a professor of library science at East Carolina University applied Perry's work to the university classroom. While students in a given class will each be at different levels of cognitive development, Mellon suggested that students be actively involved in the learning process through experiments, debates, role plays and simulations that will require them to develop, explore and ultimately explain theories. This allows students to examine facts rather than continue to view the instructor as an Authority so they can each progress according to their individual level of development.

Learning is a physical process that uses growth connectors that change the brain by creating new brain cell connections (VanDam 32; Schreiner et al. 31). These changes seem to only take place when learning is active, that is when students are doing more than listening or watching. This, combined with Mellon's findings provides compelling reasoning for lessons that require activity on the part of the student. Memory of the learning is deepened by sharing, verbalizing, writing and speaking. If the learning is not used, the brain will revert to its previous state. Too often, a 50-minute class does not allow enough time for students to actively engage and thus learn the concept being taught. Consequently, the lesson must be well designed and with ample provision to build new memories throughout the brain.

Neural imagery has allowed researchers to see what changes the brain, and in what ways. With careful study, some researchers are ready to connect action to observable reaction and describe how the brain learns. Other researchers contend that clear and direct links from neuroscience to cognition to education too often do not exist. Neural imagining has provided researchers a glimpse at how learning occurs in the brain, but linking observations to outcomes is not always a straightforward relationship. Care must be taken when adapting strategies from this very new and quickly developing area, as interpretation is not always found to be accurate. (Poldrack and Wagner 180, Sigman et al. 500) The need for classroom assessment is obvious in adopting these, or any new pedagogy.

Neuroimaging indicates learning activities that occur in the brainstem, the limbic area/hippocampus, the pre-frontal cortex and the cerebellum. Studying these areas of the brain suggest teaching methods that will lead to greater learning. The brainstem, where we first become aware, can be stimulated through the senses. Anything from music and movement to peppermint and photographs will stimulate students' awareness in the brainstem. Pre-learning activities may ask students to wiggle their fingers, touch an unfamiliar surface or provide them with cool jazz as they prepare for instruction to begin.

Meaning and memory begin to form in the hippocampus. Memory is the only evidence of learning and our work in the hippocampus is essential. There are 5 known types of memories and being aware of them helps educators best prepare to meet instructional goals (Sprenger 46). Semantic or word memory can be reinforced with graphic organizers or debate. Emotional memory is remembering our feelings at the time. We often address emotions through art or music which can calm, inspire or intensify an experience. Body language and tone of voice also impact emotions. Automatic memory is a conditioned response, such as teaching children to say 'please' and 'thank you' at the appropriate time. Episodic memory is location orientated and indicates the importance of holding library instruction in the library. Procedural memory is movement through a process and can be enhanced through rhythmic motion or song. Initiating more than one type of memory strengthens the learning when we create experiences that combine a positive emotional response to a connection to place or movement. Adding graphs or diagrams to a concept will enhance learning because visual memories far outlast those of words and texts. Noted educator Roland Barth appreciated the use of humor to enhance learning (Shore 2). Laughter also increases the flow of oxygen to the brain and creates community as laughter indicates communal acceptance and understanding (Freeman and Wash 106).

Learning continues in the pre-frontal cortex where intense cognitive functions such as planning, problem solving and creating occurs. The cerebral cortex is the outermost-layered structure of neural tissue of the cerebrum and in normal brains is the part that allows the internal processes of the brain to connect with the external world through speech, writing, drawing or singing. Activities which allow student learners to find solutions, develop pathways or transfer information will build more learning connectors in the cerebellum.

In Practice

50 minute, one-shot teaching opportunities resemble training sessions far more than they do classroom teaching. They often lack the opportunity to build a relationship with the learner or to control the physical environment, two important considerations in brain-based instruction that can be achieved in classroom teaching. The creation of an inviting environment reduces anxiety and reaches students on an emotional level that allows learning to take place Van Dam applied brain-based learning to training and development, "instruction that is planned and focused on the acquisition of skills and knowledge for a specific task" (O'Brien et al. 471). His research stresses work from the field of cognitive neuroscience, the study of mental brain processes and its underlying neural systems (Van Dam 32).

There are strategies to build emotional connections and improve the learning environment. The teacher librarian may have students write their name on an index card along with their research topic. If sports, travel or music are incorporated into the presentation, have students provide information along those lines as well. Use these cards to call on students by name to answer questions you pose during the session. Students feel as though their opinion and thoughts matter if they're allowed to share comments with backchannels such as Twitter or Today'sMeet or by participating in short surveys with clickers or *Poll Everywhere*, software which allows students to use their cell phones to participate in class.

Understanding the brain explains how to develop the timeline of instruction for a class. The learning should be divided into short sessions so that the brain will best remember what it taught first and last. The least important information should be taught in the middle. No concept should be taught longer than 20 minutes (Van Dam 33). This prescribes no more than three major topics for one 50-minute class. Chunking information will allow for more to be taught to students; however the focus should only be on one topic (Freeman and Wash 105). Chunking will group together material allowing learners to observe patterns, causes or other commonalities. While teaching how to explore the card catalog, a librarian will also teaching how to use facets, key word searching, limiters and various types of search terms. In this way, material is chunked together.

Encouraging learners to reflect after the class ends will serve to deepen the learning experience. The author has done this by having students locate resources in the library and then sharing a photo of the books they find on Twitter at @isulib. This connection then led to conversations about the student's search experience and provided the librarian the opportunity to remind them about the next class.

Each 20-25 minute lesson should engage the students first by making emotional contact (brainstem), followed by addressing the appropriate type of memories that will be built (hippocampus) where learning will deepen with problem solving or planning activity (prefrontal cortex). The lesson should close with review or reflection. If students have the opportunity to reflect after class, they will deepen their learning experience. If there is not ample time for students to successfully complete three short lessons, only plan two. Learning will be impeded if students face the stress of rushing to successfully complete tasks. Be physically and emotionally accessible to students. It can be difficult to find ways to get college freshmen moving around a computer lab during library instruction sessions, but it will help in this regard if the librarian moves around the room, not only increasing accessibility but also bringing movement into the session.

Understanding how the brain works will help librarian teachers maximize their experience with students. These learners come to class full of prior experiences that can be built upon to enhance learning. Building upon prior knowledge will strengthen new learning. Teacher librarians can build relationships with students by asking them to share their experiences researching with search engines. This will create a comfort zone for students to begin learning new material.

Games can be used to combine word and emotional memories in the hippocampus. Rather than talking students through library services while they sit and listen, consider engaging them with a game of PowerPoint Jeopardy! or Concentration that will require them to search the library's homepage matching the service to its name or an information source to its best use. These activities will also more fully engage both hemispheres of the brain.

Use backchannel tools to ask what has been most significant to them in the session so far; ask what they find most useful or even most confusing. These embedded assessments will require learners to reflect on their experience and intensify brain learning. Involve students in small group work to reduce their stress while collectively exploring new knowledge. Assign students to work in pairs to list key terms for a given topic or to discern search results. Small

groups can complete Venn diagrams on Mindomo that compare search engine results to database results, create mind maps that illustrate information in a video you assign about academic researching or identify which articles in a search results are from scholarly sources. Working in small groups, students can work from their left hemisphere when asked to complete mind maps that show the types of resources in the library and how they relate to one another or they can use the same activity to work through their research topic. Teacher librarians can demonstrate a process for finding keywords, allow students to practice the process and then to search with the keyword. Reflecting after each of these activities will clarify any uncertainty while deepening the process as it brings more change to the brain.

Conclusion

Using brain-based learning in library sessions not only deepens learning by using methods that address how the brain retains knowledge, but it addresses the student as a learner. In these sessions, librarians begin to value their learners and what they bring to these sessions. Our learners see us as someone who cares about them and their research.

Incorporating these new strategies is only a beginning. Some of these activities need to be better correlated to emerging technologies. As librarians begin to work more closely with individuals, they will realize that some students need alternative strategies, that learning theory only applies to “normal” brain behavior. They will realize the need for a variety of methods and the need to work closely to know individual needs as they are faced with students of varying social, emotional and cognitive abilities. Assessment and instruction go hand in hand and tools to assess learning will be required to identify best practices.

This librarian will begin the fall semester with library sessions that utilize brain-based learning strategies such as those mentioned in this article. Assessment activities will also be developed to measure whether students are beginning to learn how to use specific library tools while developing a positive attitude about the library.

To teach, impart knowledge, affect attitudes toward research and to build positive habits of mind, librarians have to view themselves as educators during instruction sessions. This requires not only using a technology gadget or interactive learning to keep students awake, but to comprehend the efficacy of creating nurturing learning environments that include the physical setting, and the instructor’s attitude toward the learning and lessons that relate to individuals assembled in a given class.

Works Cited

“Brain based learning.” *The Greenwood Dictionary of Education*. 2nd ed. *eBook Collection (EBSCOhost)*. Web. 6 June 2014.

“Cognitive.” *The Greenwood Dictionary of Education*. 2nd ed. *eBook Collection (EBSCOhost)*. Web. 6 June 2014

Freeman, Greta G.1, and Pamela D. Wash. "You Can Lead Students To The Classroom, And You Can Make Them Think: Ten Brain-Based Strategies For College Teaching And Learning Success." *Journal On Excellence In College Teaching* 24.3 (2013): 99-120. *Education Source*. Web. 11 May 2014.

- Gedeon, Randle. "Accessing the Right Brain with Bibliographic Instruction." *Research Strategies* 16.4 (1998): 259-269. *Education Source*. Web. 10 May 2014.
- Jackson, Rebecca. "Cognitive Development: the Missing Link in Teaching Information Literacy Skills." *Reference & User Services Quarterly* 46.4 (2007): 28-32. *JSTOR*. Web. 26 Feb. 2014.
- Kapitzke, Cushla. "Information Literacy: The Changing Library." *Journal of Adolescent & Adult Literacy* 2001: 450. *JSTOR*. Web. 11 May 2014.
- Lanning, Scott. *Concise Guide to Information Literacy*. Santa Barbara: Libraries Unlimited, 2012. 26 Feb. 2014. *Google Books*. Web. 6 June 2014
- Mackey, T P, and T E. Jacobson. "Reframing Information Literacy as a Metaliteracy." *College & Research Libraries*. 72.1 (2010): 62-78. *ACRL Web*. 11 May 2014.
- Magolda, Marcia B. Baxter, Patricia M. King, Kari B. Taylor, and Kerri M. Wakefield. "Decreasing Authority Dependence During the First Year of College." *Journal of College Student Development* 53.3 (2012): 418-435. *Project Muse*. Web. 9 May 2014.
- Mellon, Constance A. "Library Anxiety: A Grounded Theory and Its Development." *College & Research Libraries* 47.2 (1986): 160-165. Print.
- Milam, P. "Brain-friendly Techniques for Teaching Information Literacy Skills." *School Library Media Activities Monthly* 21 (2004): 26-26. *MasterFILE Premier*. Web. 10 May 2014.
- Poldrack, Russell A, and Anthony D. Wagner. "What Can Neuroimaging Tell Us About the Mind? Insights from Prefrontal Cortex." *Current Directions in Psychological Science*. 13.5 (2004): 177-181. *JSTOR*. Web. 10 May 2014.
- Schreiner, Mary B., Cynthia D. Rothenberger, and A. Janae Sholtz. "Using Brain Research To Drive College Teaching: Innovations In Universal Course Design." *Journal On Excellence In College Teaching* 24.3 (2013): 29-50. *Education Source*. Web. 10 May 2014.
- Shore, Rebecca A. "'profound Levels of Learning" Through Brain-Based Teaching: a Tribute to Roland Barth." *Educational Forum*. 76.1 (2012): 129-136. *ERIC*. Web. 29 Apr. 2014.
- Sigman, M, A.P Goldin, M Sigman, A.P Goldin, M Pena, and S Ribeiro. "Neuroscience and Education: Prime Time to Build the Bridge." *Nature Neuroscience*. 17.4 (2014): 497-502. *Academic OneFile*. Web. 6 June 2014.
- Sprenger, Marilee. *Learning and Memory: The Brain in Action*. Alexandria: Association for Supervision and Curriculum Development, 1999. 29 Apr. 2014. Print.
- Sykes, Judith A. *Brain Friendly School Libraries*. Westport, Conn: Libraries Unlimited, 2006. 28 Apr. 2014. *eBook Collection (EBSCOhost)*. Web. 6 June 2014.

Van Dam, N. "Inside the Learning Brain." *T+D*. 67.4 (2013): 30-35. Web. 9 June 2014.
<<http://www.astd.org/Publications/Magazines/TD/TD-Archive/2013/04/Inside-the-Learning-Brain>>.

Willis, Judy. "Which Brain Research Can Educators Trust?" *Phi Delta Kappan*. 88.9 (2007): 697-699. *MasterFILE Premier*. Web. 6 June 2014.

Team-Based Learning and Information Literacy

Mahrya Carncross
Instructional Services Librarian
Western Illinois University
Macomb, IL

Abstract

Team-Based Learning (TBL) is an instructional method that harnesses the power of peer interaction and elements of the flipped classroom to foster student learning. In this presentation, the presenter will share her experience with teaching a 3-credit information literacy class using TBL. The presenter will demonstrate how she used backward design to create assessments and activities to measure mastery of learning outcomes. The presenter will also outline the basic structure of the course and share some of the class activities that students were required to complete. Specifically, the presenter will share a sample quiz activity that closely mirrors what is actually done in class.

After describing my course's structure and process, the presenter will share some of the things she learned about TBL and information literacy after teaching it for three semesters. The presenter made major and minor tweaks to the course over time, with the goal of improving students' learning experience. The presenter will discuss how these changes have improved (and failed to improve) the course.

Although TBL is meant to be used in courses that last a full semester or quarter, the presenter believes certain elements could be successfully applied in a one-shot or embedded library instruction experience. The presenter will close the session by sharing some ideas for applying elements of TBL in these more traditional IL instruction settings.

Libraries in Lean Times: Increasing Efficiency, Improving Services, and Cutting Red Tape

Melissa Clark
Information Services Librarian
South Dakota State University

Mary Kraljic
Access Services Librarian
South Dakota State University

Susan Sutthill
Acquisitions Associate
South Dakota State University

Abstract

Developed by industry to refine their manufacturing processes, Lean principles can be equally effective when applied to library processes and procedures. Lean management aims to reduce waste (in terms of time, energy, and resources), streamline operations, increase efficiency, and maximize value for customers (or, in our case, patrons). In times of shrinking budgets and increasing patron demand for library services, these considerations are especially valuable. Evaluating and revising library processes and procedures according to Lean principles will result in less time spent on housekeeping duties and more time spent on projects that truly matter. This paper addresses the how's and why's of Lean management, the steps and adaptations necessary to apply it to library processes, and the application of Lean principles to lost-book searching and weeding at South Dakota State University's H.M. Briggs Library.

Introduction

Lean management was developed by industry to refine their manufacturing processes, and it aims to reduce waste (in terms of time, energy, and resources), streamline operations, increase efficiency, and maximize value for customers. In recent years Lean has been applied to an increasingly wide variety of organizations, including non-profits, academic institutions, and libraries.

Lean process management is guided by five principles:

1. Specify value as defined by the customer whose needs are served by this work process, analyze all activities from the customer's point of view, and identify any wasted effort that does not serve the customer's needs.
2. Identify a value stream by using flow charts or other tools to examine every step, to categorize each step as either value-added or non-value-added, and to eliminate blatantly wasteful steps.
3. Generate flow in the process to prevent bottlenecks and batching.
4. Utilize pull processing (Just-In-Time processing) practices.

5. Pursue perfection through continual review and improvement of the process. (Womack and Jones 16-26)

In a library setting, these principles could be used as a tool to build employee confidence and increase their capacity for change (Tornquist and Steinlicht 2).

Review of the Literature

The principles of Lean Manufacturing, originally developed in Japan by the Toyota Motor Corporation, spread to the United States in the late 1970's and were quickly adopted by the manufacturing industry (Huber 2-3). Although experimentation with Lean principles in libraries began early in the 21st century (Huber xix-xxii), publications on the applications of Lean in libraries began to appear only in the last decade.

Case studies of Lean applications to a variety of Library processes have been published, representing both public and technical services: the ordering and receiving of materials at Wichita State University's Libraries (Alexander and Williams); the electronic reserves system at the University of Notre Dame (Tuai); shelving operations and management at the University of Chicago's Joseph Regenstein Library (Kress); processing and responding to email reference questions at The University of Ohio Libraries (Murphy); reference, circulation, and document delivery at the University of South Australia Library (Coher); the acquisition, cataloging, and processing of print materials at the University of Aberdeen Library and Historic Collections (Armstrong-Viner); the checking in and reshelving of returned items at the Arapahoe Library District (Grice and Martel); credit card purchases at the University of California, Davis Library (Spagnolo); and a table-of-contents alert service at the Health Group Medical Library (Glusker).

As in the business world, the application of Lean principles in libraries is typically initiated top-down, sometimes originating from the parent organization (Armstrong-Viner 16; Glusker 3; Spagnolo 483) and sometimes from the library leadership (Alexander and Williams 288-90; Kress 166). Bottom-up or grassroots Lean initiatives are rare, but have been attempted (Murphy 224; Tuai 114).

Regardless of where the change originates, administrative support and the involvement of library staff are both essential for the initiative's success: top-down leadership is needed to supply resources and help overcome resistance to change, and bottom-up support is needed to build enthusiasm and provide intimate knowledge of the process (Huber 21-22). This necessity was observed and noted in the grassroots Lean library projects that have been published. Murphy acceded that full implementation of Lean would require support from administration (224), and Tuai cited a lack of administrative support as one of the reasons that two of the three initiatives at his library failed (114).

Most librarians do not specialize in management or business styles, and as a result, the introduction of Lean in libraries typically involves working with external partners. Some libraries have collaborated with companies that utilize Lean, such as the Boeing Company (Alexander and Williams 283-84) and the Heckman Bindery (Kress 164-65). Students may

also be employed in Lean projects either for their expertise or to provide them with practical experience. Industrial engineering (Alexander and Williams 283-84) and business administration (Murphy 218) programs both have great potential for collaboration. An expert may also be brought in to serve as a coach or consultant for the team (Armstrong-Viner 20; Spagnolo 483).

Lean project teams vary in size depending on the nature and composition of the process being reviewed, but team members should possess diverse skills and represent a variety of positions, which allows for a deeper understanding of the process and more creative suggestions (Alexander and Williams 292; Armstrong-Viner 17-18). Huber recommends that this cross-functional team be composed of those directly involved in the process being reviewed and who will consequently be impacted most by its revision (26-27), a view that is shared by Grice and Martel, Kress (164), and Tuai (115). However, selecting appropriate team members from outside the library can increase the Lean expertise in the group and introduce an external perspective of the process and its value. Alexander and Williams found that engineering students and Boeing employees contributed greatly to their effort (283-84), although a team composed almost entirely of outsiders (Murphy 218) may not be as successful.

The impetus for a Lean review may come from administration, but the review itself and development of new procedures should be a collaborative, egalitarian effort (Alexander and Williams 286; Armstrong-Viner 18; Glusker 2; Kress 168). When administrative support for the review is lacking, different approaches may need to be employed. Tuai increased the collaborative activities to also include the project's goals in order to garner goodwill (115), while Murphy most likely functioned as an authoritative leader or instructor for the students working with her (218).

Although Lean projects in the business world are typically compressed into a short, intense period, libraries often alter this timeline due to the need to continue providing services during the project and, as a result, complete their Lean process reviews over the course of 3 to 9 months (Glusker 8; Kress 164-69; Murphy 218; Spagnolo 484; Tuai 118). Wichita State University Libraries, however, did retain the short, intensive schedule used in business for their accelerated improvement, which likely resulted from Boeing engineers being part of the team workshop (Alexander and Williams 287-90). Additionally, the University of Aberdeen Library employed the Kaizen Blitz approach to Lean, which took place during a single work-week with implementation beginning the following Monday (Armstrong-Viner 18-20). Though it is not entirely clear why this timeline was chosen for the project, it may have been recommended by their facilitator.

Lean does have great potential for improvement in libraries, but some adjustments may be required to fit the service-oriented world of libraries. In addition to modifying the timetable for review and implementation, Lean was developed for manufacturing, which is fundamentally different from service industries. "Service products have unique attributes that distinguish them from durable goods" (Murphy 216). Most of the libraries that have attempted Lean initiatives thus far have focused on standardized, tangible processes that support operations, instead of service-oriented tasks and direct contacts with patrons. Murphy advocates blending Lean with Six Sigma to decrease variation in processes and to account for

the different needs of libraries (215-17). It will be interesting to see what other solutions are proposed in the coming years.

Lean Process Improvement at Hilton M. Briggs Library

Hilton M. Briggs Library serves the students, faculty, and staff of South Dakota State University (SDSU), which is a 4-year, public, land-grant institution located in Brookings, South Dakota. SDSU is the largest college or university in the state of South Dakota, enrolling approximately 12,500 FTE, employing 578 full-time faculty, and offering degrees in 183 fields of study (South Dakota State University 2-7). Briggs Library employs 13 professional librarians, 15 civil services staff, and numerous student assistants; and collections include approximately 672,000 books, 18,000 eBooks, 34,000 journals, 573,000 government documents, and 150 databases.

Lean process management was implemented in the Library as the result of collaboration between the Chief University Librarian, who had some familiarity with Lean, and a faculty member from the Construction and Operations Management Department (C&OM), along with the head of the department (Tornquist and Steinlicht 2).

When the University's new strategic plan for 2013-2018 was developed, it called for the introduction of Lean management for processes throughout the university (South Dakota State University "Goal 4"), and Briggs Library responded by incorporating Lean in the action steps for Goal 4 of the unit's strategic plan. "Develop and implement Lean processes to enhance efficiency and efficacy of library practices and procedures for library patrons" (Hilton M. Briggs Library 3).

Lean and the Lost Book Handling Process

Following two days of training in Lean principles and process, 11 library staff members, including librarians and paraprofessionals volunteered for a committee to use Lean to improve the lost book handling process. The full committee met for four half-days during January to May 2013, but additional work was done in subcommittee meetings. Meetings of the full committee were chaired by the faculty member from C&OM, and she was assisted by a graduate student in her department.

This process had been selected by consensus of the library staff for multiple reasons. It affected people in every unit of the library - public services, technical services, archives, and administration. Written procedures for handling lost and missing books were incomplete, so some critical steps in the procedures were lost over time through staff turnover. This had resulted in a backlog of long overdue loans and missing books that had never been billed, replaced, or deleted from the catalog. This backlog, in turn, adversely affected patrons' ability to quickly obtain materials discovered through the library catalog.

The Lean process began with a discussion of the lost book process in the full committee. Detailed steps beginning with "Book identified as lost (or missing)" were listed on a large whiteboard. The graduate student drafted a flow chart based on the list and brought it to the next meeting. The initial flowchart revealed that there were, in fact, four similar and sometimes overlapping processes that needed to be analyzed:

- Missing books – not checked out, but also not on shelf (Search & Notify procedure).
- Lost books – either reported as lost by a patron or missing for over a year.
- Long overdue books that were tagged with “Lost” status in the catalog but had not been billed to the patron, replaced, or deleted from the catalog.
- “Claimed returned” books – those that are still checked out but the patron claims to have returned.

These four processes were divided into three categories, each one assigned to a smaller task force of 3-4 committee members who met separately and further detailed the steps in each sub-process.

The full committee reviewed the detailed steps in each sub-process and identified areas of waste and areas where value could be added to the patron. This part of the Lean process was painstaking and revealed many value added, non-value added, and wasteful steps in the process.

The committee’s most significant findings included the following, but numerous other minor wastes were also found and eliminated:

- Lost items remained in lost status too long before replacement or deletion from the catalog.
- Patrons had to wait too long to get materials they needed that were in the catalog but not immediately available in the library.
- The paper system used for “Search & Notify” service for missing books was slow, sometimes resulted in duplication of effort among staff members, and required additional work that could be eliminated or automated if converted to an online system.

Several significant changes were made based on the committee’s findings:

- Patrons no longer have to fill out a Search & Notify form when an item is not on shelf. Staff members check shelves immediately and, if not found, enter Search & Notify information into a spreadsheet on a shared drive.
- Staff immediately change the status of an item to “Missing” (or “Lost”) if it is not on shelf so that others know that a Search & Notify is already in progress; this eliminates duplication of Search & Notify slips for items already reported as missing or lost.
- Interlibrary loan (ILL) policy now allows patrons to request an item through ILL if it is “Missing” from our collection. They previously had to wait for at least one week for shelves to be checked multiple times.
- Staff developed a complete set of detailed written procedures assigned to specific positions within the library to ensure that procedures will be followed. This greatly contributed to eliminating the backlog of lost or long-overdue books that had not been billed, replaced or deleted from the catalog.

The application of Lean to the lost book handling procedures has been successful, as demonstrated by several outcomes:

- Patrons can (and do) immediately request material through ILL if it is not on shelf at the point of need.

- Backlog of 550 lost items has been reduced by 55%.
- Regular, monthly billing procedure for lost books is finally in place and in compliance with a South Dakota Board of Regents policy set in May 2012.

Since the initial review, the procedures have continued to evolve and improve, indicating that staff have begun internalizing Lean principle #5 – the pursuit of perfection.

Weeding and Relocation Process

After a successful review of the lost book handling process, the Department of Public Services was eager to apply Lean principles to another process. The weeding and relocation procedures were unanimously chosen as the next project.

All members of the department were given the opportunity to volunteer for the team. The group was originally led by the Head of Public Services, and representatives from Information Services, Access Services, and Technical Services were included. After the Head of Public Services left the University in February 2014, the representative from Information Services, which is the largest subdivision of Public Services, became the team leader. The three remaining team members, who are also the authors of this paper, have shaped the new procedures to meet the needs and address the concerns of all involved parties. The team began working on October 30, 2013, and met weekly for a total of sixteen one-hour meetings before piloting the new procedures in June and implementing them in early FY15.

Library staff unanimously agreed that weeding of the reference and circulating collections was desperately needed, but the existing process was not conducive to execution: the written procedures were incomplete, the process was complicated and lengthy, and there was no inducement to carry it through to completion. Weeding understandably became a low priority, especially when more important tasks presented themselves.

Without systematic or regular weeding, the collection had become outdated, both in the currency of materials and the subjects supporting the University's programs. Removing materials that are outdated or no longer useful makes it easier for patrons to locate suitable materials in the library and creates a collection that better supports the needs of students, faculty, and staff, supporting one of the action steps for Goal 1 of the Library's strategic plan: "Ensure that collections are aligned with the teaching and research priorities of the university" (Hilton M. Briggs Library 2).

The time was ripe for a Lean approach to weeding.

Initial discussions revealed that there were, in fact, processes for four different material types that needed to be analyzed:

- Circulating collections, including the main circulating collection, the oversize collection, and the audio/visual collection.
- Reference materials that are new editions on standing order.
- Reference materials that are new editions not on standing order.
- Reference materials that are not new editions.

Team members began outlining existing procedures and spent approximately 2.5 months of weekly meetings working through the process step-by-step, sometimes reworking sections multiple times to catch steps or contingencies that were missed the first time.

The committee's most significant findings included the following, but numerous other minor wastes were also found and eliminated:

- Procedures for different collections included critical differences, which made them difficult for staff to keep straight.
- Items remained on weeding or relocation review until the required librarian(s) had approved the recommendation, which occasionally took as long as a year.
- Written weeding and relocation slips required some time to transcribe information from online systems and was sometimes performed by professional librarians.
- Expectations for assigned subject areas and time spent weeding were not established.

Several significant changes were made based on the committee's findings:

- Aligned procedures for different collections to minimize the differences between them.
- Limited the amount of time librarians had to review items on weeding and relocation review to 3 weeks.
- Replaced handwritten slips with a spreadsheet populated by information from the integrated library system.
- Shifted repetitive and simple tasks from librarians to student assistants.
- Required only the subject librarian to approve relocation of items.
- Required only two librarians to approve weeding items.
- Assigned each LC subclass to a pair of librarians to ensure equal responsibility and attention.
- Assigned oversight to the Head of Public Services.

The new weeding process was not fully implemented at the writing of this paper, so the results will be discussed in the presentation.

Insights and Lessons Learned

In learning about and applying Lean, Briggs Library has experienced some cultural shifts.

Collaboration between employees in different departments, especially those who do not typically work closely together, resulted in development of better work relationships and a greater understanding and appreciation of the dynamics in library workflows. In addition, employees not directly involved in certain steps of the process were often best able to analyze those steps by questioning long-held practices, noticing wastes, and proposing good solutions.

Insecurities among the staff were initially a problem, but diminished as we worked through the process. Employees who worried that the lean process might result in "downsizing" have come to see that their time could be redirected toward more valuable duties. Those who felt

defensive when wastes in their area of responsibility were identified came to view the scrutiny as constructive criticism and look forward to the leaner way of doing things.

Consulting with employees not on the Lean review team can help overcome resistance to change, especially when their concerns were addressed and taken into account in the final process.

Lean thinking is permeating the library, especially among those who have already completed at least one lean process. Employees are beginning to analyze other duties for possible Lean modification and comment on the possibilities.

Conclusion

In recent years Lean has been applied to an increasingly wide variety of organizations, including non-profits, academic institutions, and libraries. Lean process management was implemented in Briggs Library as a result of a collaboration between the Chief University Librarian and faculty in the University's Construction and Operations Management Department. Library staff has now conducted two Lean reviews. Lean analysis of lost book handling resulted in benefits to both patrons and staff, and the new weeding process is expected to also benefit both patrons and staff once it is implemented. Lean thinking is permeating the library, and the benefits of Lean have extended beyond these specific projects. Due in part to these positive outcomes, additional Lean reviews are being planned at Briggs Library.

Works Cited

- Alexander, Gwen, and John H. Williams. "The Impact of an Accelerated Improvement Workshop on Ordering and Receiving." *Library Collections, Acquisitions, & Technical Services* 29.3 (2005): 283-94. *EBSCO MegaFILE*. Web. 5 June 2014.
- Armstrong-Viner, Robin. "Lean Kaizen: Empowering the Team in Interesting Times." *Catalogue & Index* 161 (2010): 16-20. Web. 4 June 2014.
- Cother, C. "From Big Change to No Change: Discovering Lean through Action." *IATUL Proceedings, New Series* (2009): n. pag. *Purdue e-Pubs*. Web. 4 June 2014. <http://www.iatul.org/doclibrary/public/conf_proceedings/2009/cother-text.pdf>.
- Glusker, Ann. "Implementing the Transition from Full- to Self-Service Table of Contents Alerts: A Case Study." *Journal of Hospital Librarianship* 13.1 (2013): 1-10. Web. 4 June 2014.
- Grice, Daisy, and Jane Martel. "CALCON 2012 - Lean Material Processing: Work Smarter, Not Harder." *Colorado Libraries* 36.4 (2013): n. pag. Web. 4 June 2014. <<http://coloradolibrariesjournal.org/articles/calcon-2012-lean-material-processing-work-smarter-not-harder>>.
- Hilton M. Briggs Library. "Strategic Plan: July, 2013." *www.sdstate.edu*. South Dakota State University, 2013. Web. 25 June 2014. <<http://www.sdstate.edu/impact2018/plans/upload/Hilton-M-Briggs-Library.pdf> >.

- Huber, John J. *Lean Library Management: Eleven Strategies for Reducing Costs and Improving Customer Services*. New York: Neal-Schuman, 2011. Print.
- Kress, Nancy J. "Lean Thinking in Libraries: A Case Study on Improving Shelving Turnaround." *Journal of Access Services* 5.1-2 (2007): 159-72. Web. 4 June 2014.
- Murphy, Sarah Anne. "Leveraging Lean Six Sigma to Culture, Nurture, and Sustain Assessment and Change in the Academic Library Environment." *College & Research Libraries* 70.3 (2009): 215-25. Web. 4 June 2014.
- South Dakota State University. "SDSU Facts 2013-2014." *www.sdstate.edu*. South Dakota State University, 2013. Web. 18 June 2014.
- . (2013). "Goal 4: High-Performing University." *www.sdstate.edu*. South Dakota State University, 2013. Web. 25 June 2014.
- Spagnolo, Lisa. "Give a Little Bit: Using Lean Tools to Create Efficiencies in Acquisitions and Beyond." *Proceedings of the Charleston Library Conference* (2011): 483-87. *Purdue e-Pubs*. Web. 23 June 2014.
<<http://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1222&context=charleston>>.
- Tornquist, Kristi and Carrie Steinlicht. "Lean Serendipity." *mpla.us*. Mountain Plains Library Association, 2013. Web. 19 June 2014.
<<http://mpla.us/documents/handouts/2013/tornquist.pdf> >.
- Tuai, Cameron K. "Implementing Process Improvement into Electronic Reserves: A Case Study." *Journal of Interlibrary Loan, Document Delivery & Electronic Reserves* 16.4 (2006): 113-24. *Academic Search Premier*. Web. 4 June 2014.
- Womack, James P., and Daniel T. Jones. *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. New York: Free Press, 2003. Print.

Building a Student Employee Program Based on Professional Development

Adam Fullerton
Library Director, Assistant Professor
Morningside College

Karen Johnson
Circulation Manager
Morningside College

Abstract

Student employees are often the workhorses of a library, and without their help, many of us would not be able to function. They provide the assistance needed to complete many of a library's daily tasks and duties. For Morningside College library, this is especially true.

In general, the Morningside College Library program was beginning to feel dated and the students lacked inspiration to stay interested in their work at the library. Really, who can blame them? So staff asked the question, how can we get our student employees interested in the duties that we need them to perform? The answer was to provide them with some incentive and to demonstrate the value of their work at the library in ways that were more meaningful to them.

This paper will talk about the decision to scrap the program and create a new one that would focus on learning experiences and professional development. Authors will discuss how their library created an interactive online experience for their student employees and moved their student employee documentation and training to an online format. The paper will conclude with their anticipated adjustments and additions to the program, which includes things such as: new positions, additional training, and our attempt to bring in more professional development aspects to continue adding value to their program.

Introduction

Morningside College Library has a small staff and has always used student workers. In the past the library had more physical items and students were allotted more hours from their work/study grants. This allowed the library to hire fewer students, and those students spent more time working and learning with the library staff. At that time it was a sufficient system. While the students' needs were not disregarded, the needs of the library were the primary concern -- the value of library work to students was implicit.

The library at present has far less physical items and the work/study program at Morningside has changed. The grants now only cover about 6 hours a week per student, if the student stays employed the entire academic year. The library can keep students employed for a limited time after the grant monies run out, but bears the entire cost of doing so. Previously the library had been allowed to keep students on after the grant monies ran out for however long it was willing to pay the cost. Many of the students only worked their 6 hours a week and simply sat at the circulation desk.

The training and communications remained squarely anchored in the past. We had 2 major training sessions a year; otherwise it was on the job training. There was a binder of printed procedures, and while policies were reviewed with the students verbally and electronically, there was not a central place to review policies and procedures if the need should arise.

Communication with students began to falter in regards to expectations and daily communications. There had never been a formal review process to communicate to students about their ongoing performance, and in recent years, the library noticed that students had stopped using email as a form of communication. Daily updates and shift coverage requests were not being seen or responded to without constant verbal prompting.

All of this resulted in a group of students who were underutilized, less engaged and ill-equipped with the skills needed to handle some of the most basic customer service interactions.

Literature Review

Very little literature was used when this project was undertaken due to the fact that the library staff immediately identified the desire to create a program that was designed specifically for Morningside College; however, a quick review of the literature identifies a number of common problems that numerous libraries are facing, including Morningside College, regarding their student employees. One of the major issues resonating is the effort to train students versus the return from students (Beile). Jane M. Kathman and Michael D. Kathman address the same issue along with a number of others including: the disproportionate number of student employees versus supervisors, limited time for training, the students' lack of desire and commitment, and several others. Beile's and Kathman's articles share another common attribute that seems to resonate through a significant portion of the existing literature that was reviewed. This attribute is the focus on getting student employees to deliver for the library – not the other way around. Recently, there has been some change in philosophy regarding this, but it seems to be focused at the possible librarians of the future rather than the entire student employee body (Maxey-Harris, Cross and McFarland). This addresses one of the major changes the Morningside College Library works to confront and that is the shift in philosophy to a student-focused program that develops professional skills and etiquette through the work being completed at the library.

Creating a New Program

Understanding Expectations

It was time to make some major changes. To begin with, the student expectations needed to be identified and reexamined. The following questions were raised:

- What are the student employee expectations?
- Are these expectations realistic?
- How is the staff helping students achieve these expectations?

The answer to the first two questions was straightforward. The library was expecting student employees to be responsible, productive, engaging, customer friendly, professional, and to take some initiative. For the most part, the staff felt these were realistic for “most” of the

students. The third question was a bit more complicated: How is the staff helping students achieve these expectations? For all intents and purposes, we were not; not helping students in a way that was engaging. As mentioned earlier, communication was very poor. Official documentation regarding policy was held locally on staff computers or only on paper in a binder. If the students didn't save the email they often didn't know where to find the information. The library staff's expectations were not being communicated to the students clearly or often enough. One time in the large group training at the beginning of the year was clearly not enough. The problem with the program lay with the library staff and not the students. A more formal policy was required in order to better communicate expectations. There also needed to be a way for them to find all the information whenever they needed it.

A New Philosophy

The library began by investigating other institutions' policies and documentation regarding their student employees. What they discovered was the majority of these policies addressed appropriate professional attire, punctuality and attendance, but did not address why students should adhere to them. Along the same lines, the library had defined the expectations for the student employees, but needed a way not only to communicate the expectations, but to also teach and demonstrate these expectations in a way that would be meaningful to the students, while still getting the work done around the library.

The timing for such a change was perfect. The college had recently begun to evaluate student experiences outside the classroom and how these experiences were shaping and influencing the students. The college identified a number of "holistic" areas that were not being addressed through the curriculum, such as professional etiquette and behavior. The staff agreed that it was essential to incorporate these concerns the college had raised into the new student program and policy. It was decided that the best way to incorporate the concerns of the college and to garner student engagement was to make this more about the students and less about the library. It needed to be a learning experience.

The new program now had two objectives: teach and develop professional skills to the student employees and to maintain a trained and adequate student workforce necessary for the continual operation of the library. Once all of the policies, guidelines and philosophies had been gathered, a formal policy was drafted and sent to the various stakeholders on campus for review. Both the Financial Services Department, which oversees the campus wide student employee program, and several college administrators reviewed the library's plan and accepted it. The final policy was drafted and adopted for the upcoming semester's student employees.

Selecting the Necessary Tools

Before implementation of the new program could begin, the organization and process in which the program operated needed to be updated. The library needed to find a new set of tools that would allow them to join the 21st century in how it organized documentation, communicated, addressed training issues, dealt with scheduling and so forth. The tools necessary to accomplish this leap needed to work across platforms from Apple to Windows and be mobile friendly, as many students interact via mobile phones more often than via laptops or desktops. These tools also needed to be able to limit access to predefined specific

groups of individuals. The staff needed something that was going to be easy to maintain and update.

Communication

As was expressed in the *Background* section, the library staff struggled to garner any kind of successful communication via email. With student employees working from 8 AM to 12 AM and library staff only working from 8 AM to 5 PM, it was essential that there was a form of effective electronic communication. The library needed a solution other than email.

When considering the possible options for communication, the library asked two specific questions:

1. What platform did the students have access to already?
2. Could the platform be kept private for only student communications?

Facebook was considered first since it provided the possibility of creating a private group for only the student employees, but it was quickly learned that several students did not have a Facebook account and were against creating one. In addition, the library felt it was better if personal networks were kept separate from work networks. The fact that Morningside College is a Google Apps campus provided a possible third option -- Google+.

All of the students at Morningside College receive a Gmail account and thus, have a Google+ account that simply needs to be activated. Google+ presents a form of communication that works on multiple platforms (web based), mobile friendly (with apps on both iOS and Android), a private community for communication, and a forum separate from personal spaces.

In addition, Google+ provides a public forum for group communication that had previously not existed outside of email. Various discussion groups could be created inside of the community that would allow students to have conversations directed at more specific topics such as: requesting time off, questions and conversations related to specific departments such as reference, technical services, or circulation.

Lastly, Google+ provided the platform necessary to communicate in a group setting that was organized and moderated. Unlike email, information posted by the library staff couldn't be deleted and forgotten. The post was saved, tagged and searchable. Students and staff would be able to revisit the communications for each semester and know exactly where to go to find the information they were looking for.

Internal Organization

Previously, documents and policies related to library operations were kept in a red binder at the circulation desk and/or on various individuals' personal computers. The majority of it was not universally accessible by other staff members or the student employees. Necessary documentation was sent out at the beginning of each semester to the student employees, but often these packets and emails were lost or deleted and not readily available when needed.

To make operational documentation readily and universally available, Google Drive was designated to be the digital file cabinet. Google Drive allows for a multiple platform (web based), mobile friendly (with apps on both iOS and Android), searchable, feature rich platform for privately or publicly sharing documents with students, staff, the campus, or the world. Combined with Google+, it provided an accessible, easily updated and controlled way to share student employee contact lists, schedules, flyers, policies, procedures, guidelines, training documentation and videos, and more.

To use Google Drive effectively, all future documents, presentations and spreadsheets were created using Google Docs, Sheets and Slides. Google's office programs allow for instant and automatic updates to student and staff related documents. Google Docs and Sheets offer offline access as well, allowing for staff to update policies without an Internet connection.

Several other Google products were adopted for internal organization as well. The student employee scheduling was moved to Google Calendar which provides a mobile friendly multi-platform program that includes automatic shift reminders and easy access to the schedule for all student employees and library staff. Everyone knows who is working what shift and in which department.

The final piece was creating a central hub for the organization of all the various training videos, documentation, contact lists, and communications. Google Sites was selected as it met all the requirements for privacy, ease of access and sharing, and its simple setup and maintenance. The Google Calendar was embedded on the new site for everyone who works in the library to see. Documentation was embedded into relevant pages that allowed for quick access to procedures and guidelines, essentially turning Google Sites into a digital binder.

Program Implementation

The final question that needed to be addressed was implementation. A number of small changes were made in conjunction with a few more significant changes. To better communicate the new policies and changes packet was handed out prior to the first annual training session that included the new policies, expectations, and job duties. At the end of the packet, a page was included that required a signature from the student that they had read and understood the new policies and procedures. This page then was added to the student's official employee documentation.

During the training sessions that occur at the beginning of each semester, library staff went through these same packets verbally and responded to questions. Training on the use of new technology was added to the traditional library training given to the students. The library staff understood the necessity of these training sessions and made attendance to one of the two sessions held each semester required for continued employment.

Additional practices were instituted to help reinforce the new philosophy and program. Semester performance reviews were created, allowing for the circulation manager to provide direct and relevant feedback regarding the students' performance and ability to meet expectations. These reviews are documented and used for reference requests from future employers. Tasks were given to specific individuals allowing for closer mentoring and more accurate reviews of each individual's work and performance. The library enlisted help from

campus to perform “Secret Shops,” in which the students were observed on their customer services skills, without the foreknowledge that this was occurring. Quizzes were created using Google Forms to help ensure that students were familiar with the necessary procedures for library operations.

Feedback was necessary in order to continue to develop and improve the program. Google Forms was used again to gather anonymous opinions about the new program and also other areas, such as management style and job duties. The anonymous evaluation of the program was given to the students at mid-school year so any progress could be assessed. The staff also held discussions with willing students to get direct feedback regarding the program.

Conclusion

Overall, the change in philosophy and addition of new policies has been successful, but it has had a few challenges. Several returning students struggled with the sudden change in style and expectations of the program. With the signed agreement in place and the blessings of financial aid and Human Resources, a number of formal reprimands were necessary. The new program requires more training and mentoring early in the semester, which is already a busy time for library staff; however, this has led to less training and oversight of basic tasks later in the semester.

The various additions of new technology has produced positive effects overall. The Google+ Community seemed to improve communication. It was used heavily as a shift trading tool, making the finding of replacements easier and more convenient. Google Sites was not used as much as anticipated and other options are being considered for future use. One possible option is making the Google+ Community the central hub.

More development is needed in the areas of training and implementation; however, the overall student feedback was highly positive. The library would like to place more emphasis on the professional development skills students are learning in the future as that was not as emphasized early on as was planned. The library staff looks forward to the continual development of the program, and finding new ways to teach and develop professional skills in the student employees while fulfilling the essential operations of the college library.

Works Cited

Beile, Penny M. "Great Expectations: Competency-Based Training for Student Media Center Assistants." *MC Journal: The Journal of Academic Media Librarianship* 5.2 (1997). Web. 1 July 2014. <<http://wings.buffalo.edu/publications/mcjml/v5n2/beile.html>>.

Kathman, Jane M. and Michael D. Kathman. "Training Student Employee for Quality Service." *Journal of Academic Librarianship* 26.3 (2000): 176-182. Print.

Maxey-Harris, Charlene, Jeanne Cross and Tom McFarland. "Student Workers: The Untapped Resource for Library Professions." *Library Trends* 59.1-2 (2010): 147+. Web. 7 July 2014. <<http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1281&context=libraryscience>>.

Using the Dell S500wi Interactive Projector for More Engaging Library Literacy Instruction

Steven K. Profit
Reference Librarian
College of Charleston
Charleston, SC

Abstract

Dell S500wi projectors were installed in the Addlestone Library's classrooms during the summer of 2013, and Dell software was installed on all classroom computers. The library's instructional technologists trained me to use the projector's wireless functionality. When I taught LIBR 105 Resources for Research in fall 2013, I used this functionality during the class meetings focused on searching for books and searching for articles. To find books, our library has four main resources: a Discovery Service, a classic catalog, a statewide consortium catalog, and WorldCat. There are four rows of desks in the classroom; students on each row were assigned to conduct a keyword search in a particular resource. Each student used the same keywords. With the Dell projector, I was able to select a student from each row and display all four screens to the class so we as a group could compare and contrast search result lists across the four resources. I could then project one student's screen at full-size and guide her through exploring that resource's functionality. Then I could select a student from a different row and repeat this guided exploration of another book searching resource. I did the same when discussing how to find articles, using the Discovery Service, JSTOR, Academic OneFile, and Public Affairs Information Service International, in order to expose students to databases provided by different vendors. This method of instruction had every student engaged in searching a library resource, each knowing there was a possibility that he would be called upon to manipulate the resource before the class. Moreover, the ability to compare and contrast the results of the same search across resources, as well as refining/limiting and other functionality, open students' eyes to the both the basic similarities of various library resources and the characteristics that make each one especially valuable in certain research contexts.

Going the Distance but Doing It Our Way: An Embedded Librarian Program at a Small University

Gretchen M. Smith
Collection Development Librarian
Georgia Southwestern State University
Americus, GA

Abstract

When working at a small university with limited library faculty and staff, it is often difficult to determine how to implement all the innovations that are described at conferences, on blogs, and in the library literature. It takes creative thinking and the willingness to adapt ideas for such smaller institutions.

At Georgia Southwestern State University's James Earl Carter (JEC) Library, librarians faced the challenge of providing library instruction and research assistance to an increasing number of online students. All of the librarians were familiar with embedded librarian programs at other schools but worried about their viability at JEC Library with only a small number of librarians involved in the instruction program. It seemed impossible for Georgia Southwestern's library faculty to provide the same type of services as the larger universities with their dedicated subject specialists and higher number of instruction librarians. The solution was not to replicate what the large universities did, but to adapt successful programs for the needs of Georgia Southwestern's patrons. This paper will provide an overview of the guidelines and strategies that turned a trial project into a successful, ongoing service for students and faculty.

Introduction

Georgia Southwestern State University is a small, state university, part of the University System of Georgia, with a current enrollment of 2,806 students (Office of Research and Policy Analysis). The Library at Georgia Southwestern State University, the James Earl Carter Library, currently has a total of 9 full-time positions. Four of these are faculty librarians and five are staff positions.

The instruction program at the James Earl Carter Library is managed by the Reference Librarian, who is responsible for the majority of instruction sessions. The other three librarians assist with instruction by teaching library orientation sessions for the First-Year Experience course as well as one-time library instruction sessions for which the Reference Librarian is unavailable. As of 2011, faculty at Georgia Southwestern were teaching an increasing number of classes online, but while the James Earl Carter Library had a basic resource page on its website for distance education students, it had no official presence in any online courses.

The librarians at Georgia Southwestern were familiar with embedded online librarian programs. Journal articles, presentations at conferences, and blog postings all provided information about successful implementations across the country. Unfortunately, almost all

of the programs seemed to be at large universities with bigger instruction programs and dedicated subject specialists. It did not seem possible to implement such a service at Georgia Southwestern with only four librarians. Embedded librarians appeared to be one more thing that sounded wonderful but was not feasible for smaller institutions. That attitude was about to be changed.

How Things Began

Georgia Southwestern supports faculty development through the Teaching Circle Program, which provides faculty with interdisciplinary opportunities for discussion and experiences that enhance student learning. Small groups of faculty meet throughout the year and most teaching circles are organized around a common theme (“Teaching Circles”). During the summer of 2011, a Writing Across the Curriculum (WAC) teaching circle was formed to discuss ways faculty could help improve student writing.

As the Collection Development Librarian, the author decided to attend these meetings to identify resources that the Library could purchase to help support faculty in this area. At the first meeting of the WAC teaching circle, one of the School of Business Administration’s accounting professors, Carol Bishop, was speaking about her online course, Contemporary Issues in Accounting, which she was teaching that summer semester. This particular course required students to write five papers, each one utilizing more in-depth research than the last. From her previous experience, Dr. Bishop knew that her students struggled with the papers and asked for suggestions to improve both their research and their writing. The author mentioned to Dr. Bishop that she could provide library research assistance as an embedded librarian. Dr. Bishop was interested and emailed the administrator of GeorgiaVIEW (Georgia Southwestern’s course management system) to add the author to the class as an instructor, and the author started working with the class the next day.

The Pilot Project

Each summer Dr. Bishop taught Contemporary Issues in Accounting as an online course. The students were required to write five papers over an eight-week period. While all five papers required some research, the final two papers were formal research papers that required students to use only peer reviewed sources. Dr. Bishop’s 2011 summer class had 28 students enrolled. The embedded librarian was introduced to the class by one of Dr. Bishop’s discussion posts after the students had already turned in their first paper and were just starting the second one. She encouraged students to post questions to the course discussion board about doing research and properly citing sources. The most common questions dealt with locating peer reviewed journals and MLA citation guidelines. In addition to answering student questions on the discussion board and via email, the embedded librarian created posts that provided students with useful information including database recommendations, basic research tips like developing keywords, suggestions for identifying peer reviewed journals, and advice about MLA citations.

While there were no issues embedding the librarian into GeorgiaVIEW, there were issues with providing the librarian with access to Turnitin, which is how the students submitted their papers. Dr. Bishop wanted the librarian to have access to the papers so common mistakes, particularly citation errors, could be identified and addressed with the students.

Since the version of GeorgiaVIEW used during summer 2011 did not integrate with Turnitin directly, there was a separate login and password required. Within Turnitin, the course had initially been set up for only a single instructor so it was necessary to have their customer support add the embedded librarian. This was the only major issue, and it was easily addressed.

By the end of the semester, both the Library and Dr. Bishop felt that the experiment was a success. The professor felt that her students' papers were better than those submitted in the past, and the Library had successfully embedded a librarian in its first online course and was ready to expand the service.

Expansion of the Embedded Librarian Service

Discussion of expanding the service for the fall 2011 semester resulted in a total of two librarians agreeing to participate in the embedded librarian program. Since this program was added to their existing workload and because their fall semester responsibilities were already heavy due to the many First-Year Experience orientations, each librarian only took on two classes. The Reference Librarian informed all faculty about the limited program. Several faculty members expressed interest and the four slots were quickly filled with two English composition courses, a Nursing research methods course, and a business course.

Once again, both the librarians and the professors felt that the embedded librarian program was beneficial to the students. Based on experiences from both semesters, the Library instituted some guidelines for which courses were eligible for an embedded librarian. In addition, some strategies were outlined to let the librarians more effectively participate in online courses. Both of these were needed to maximize the benefit to the students and make the program feasible for a small staff.

First, only fully online classes would be eligible for the program. The business course that participated in the program during the fall 2011 semester was a hybrid course where students had both online and on campus class meetings. The librarian who worked with this class found that most of the students came and saw her in person with questions since they were often already on campus. Since the main objective of the embedded librarian program was to better serve online students, it was decided to restrict it to entirely online classes.

Second, the course must have a major research assignment. This is to ensure that the program is working with students that will be utilizing library resources the most. Related to this, the Library found that just as with on campus classes, it is important to introduce the librarian at the point of need, at the time when the students need someone to assist them with research. This means that a librarian may not need to participate within a course for the entire semester. Instead, the librarian should be embedded at the time when work on the research project begins. If an online course does not start working on the research project until the last half of the semester that is when the librarian will embed in the course. This is usually the case with first year composition courses. Students write several papers throughout the semester but only the last paper is a traditional research paper.

Third, there must be a specific library or research question thread or topic on the discussion boards. This will minimize the time that the librarian must spend monitoring the course. Making students post library and research questions to a specific discussion topic means that

there is only one topic that the embedded librarian has to follow. Activity on the rest of the discussion board does not need to be monitored by library faculty. Moreover, since Georgia Southwestern has switched its course management system to Desire2Learn, monitoring discussion boards has become even easier. Desire2Learn allows users to subscribe to specific discussion topics. This will send the user notifications when new content is posted to that specific topic. A librarian now only has to login to an embedded course to check the discussion board when they receive an alert, saving valuable time and allowing librarians to embed in more courses.

An additional benefit of Georgia Southwestern's switch to Desire2Learn is the integration of Turnitin into the system. Both students and instructors can access Turnitin services directly in Desire2Learn without a separate login, once again saving the librarian time. A final benefit is that Desire2Learn allows professors to add an embedded librarian without having to go through the campus administrator.

Conclusion: Future of the Program

Since starting the embedded librarian program in 2011, librarians at the James Earl Carter Library have been able to provide a meaningful presence in many online courses. Adapting what larger universities were doing with embedded librarian programs to work at Georgia Southwestern has proven successful. The demand for this service has only grown as the number of online courses being offered continues to increase. In addition, since 2011, Georgia Southwestern has added three new online programs – a bachelor of science in information technology, a master of science in computer science, and a master of science in nursing. These new programs have significantly increased the number of students who are exclusively taking classes online and do not have the opportunity to receive traditional library instruction.

The Library now has three librarians participating in the program. There has been some discussion of expanding the embedded librarian service to both hybrid classes and on campus classes that utilize GeorgiaVIEW extensively since instructors of those classes have expressed interest. The concern is taking on too much in the embedded program especially since the Library continues to have a popular program for traditional library instruction. The next step is to send a survey out to faculty to gauge interest and identify preferences for how library instruction is provided. The goal is to continue to provide a balanced instruction program to both traditional on campus students and online students.

Works Cited

Office of Research and Policy Analysis. "Semester Enrollment Report, Fall 2013." *www.gpc.edu*. Georgia Perimeter College, 2013. Web. 26 June 2014. <http://www.gpc.edu/News_and_Information/fall_ser_2013_highlighted.pdf>.

"Teaching Circles." *GSW.edu*. Georgia Southwestern State University, n.d. Web. 26 June 2014. <<http://gsw.edu/Resources/FacultyandStaff/TLR/teachingCircles/index>>.

Capturing Meaningful Data at the Reference Desk

Michael R. Mitchell
Reference & Instruction Librarian
Bethel University

Abstract

Many libraries keep track of reference and instruction interactions in some form. Oftentimes, these statistics will be compiled and reported at the end of the year in a way that addresses basic questions: How many reference questions were answered? How were those questions received? Which departments or majors requested instruction sessions?

This presentation makes the case for tracking reference and instruction interactions in slightly greater detail in order to capture important facets of our services. Keeping good records of public services could allow libraries to identify peak service times and high-demand patron groups, locate gaps in instructional activity, or notice what information may be missing from your library website. And the good news is that getting this information won't require too much additional work.

This presentation will aim to show a few tools and best practices for building a database of library statistics. Doing so can help you easily get at the sorts of data that can lead to improved service.

Introduction

In many ways, academic libraries are awash in data: vendors provide COUNTER-compliant reports on electronic resource usage, web analytics tell libraries how students are reaching their site, and circulation counts let librarians know which parts of the print collection are in heavy use. These three types of library data offer rich insight into the way library users engage with our collections, and notably, all three require little mediation on the part of library staff to capture. Once a script is set up for web analytics or a COUNTER report is scheduled for delivery, the data arrives somewhat automatically.

In contrast, data about reference interactions and information literacy instruction relies on documentation by library staff. This data is arguably more cumbersome to collect, but is nonetheless useful in helping librarians understand the ways that students, staff, and faculty use academic libraries. Thorough analysis of reference and instruction data helps libraries know more about their users, while also giving internal and external constituencies a meaningful view of who librarians are assisting and how those users are being served.

The author proposes that academic libraries should move beyond the collection of basic reference and tallies by doing three things. First, libraries should find common variables between their reference and instruction data sets in order to find the relationships between those two services. Second, libraries should report that data in ways that resonate with their community. And finally, libraries should use basic statistical analysis to help them gain a critical view of their data.

Review of Literature

When examining current practices in tracking reference and instruction interactions, one can look to both library and information science literature and existing national standards for an idea of what is commonly collected. One measurement that could be considered a “standard” for academic libraries is the data collected by the National Center for Education Statistics (NCES) for the Academic Libraries Survey. This instrument is completed by 3,900 libraries “in the entire universe of accredited degree-granting institutions of higher education” and beyond on a bi-annual basis, and therefore could serve as a benchmark for what is expected of academic libraries for reporting (“About the Academic Libraries Survey”).

Interestingly, the NCES reduced the number of questions it asks about reference to a single question in the 2012 survey update (“Survey Changes” 1). Whereas the previous NCES Academic Libraries surveys used to distinguish between short reference questions and longer “consultations” and asked institutions to provide separate tallies for virtual and in person reference, the 2012 survey has a one data point for reference called “Total Information Services to Individuals” (“Survey Changes” 14). For instruction data, NCES Academic Libraries Survey has two questions: the “Number of presentations” and “Total attendance at all presentations” (“Survey Changes” 14).

Fortunately, many libraries go beyond the NCES survey questions and collect more robust data for internal use. Henry and Neville report on their library’s testing of two classification systems for reference questions. In their study, they recorded “all of the actual questions they received” during the study period and later “assigned two classification codes representing the criteria defined by either the Katz or Warner classifications” (Henry and Neville 366-367). The authors note that their study and the resulting analysis of the data “encouraged the public services department to reexamine desk scheduling and the classification system currently in use” (372).

Henry and Neville’s article is just one of many in which reference statistics were used to assess a change in the configuration of reference services. Lee, Ritterbush, and Sivigny sought to monitor the use of the reference desk following the adoption of an information commons model. Indeed, with the help of reference and gate count data spanning 16 years, the authors were able to conjecture that, “Moving the reference desk in the summer of 2007 probably helped reverse the decline in in-person reference questions” (Lee, Ritterbush, and Sivigny 86). Their library’s longstanding practice of tracking reference questions gave them a large sample size in which trends could be detected.

Importantly, many studies on reference activity discuss the librarians’ desire to accurately capture what happens at the reference desk and move beyond making decisions based on staff assumptions. As Nolen and others state, “These assumptions became the catalyst for a study of actual data about patron usage” (24). In writing about a new, electronic method for collecting statistics, Garrison notes, “There was a growing desire to have more flexible access to the data we were collecting to judge the impact of instruction and subject liaison activities” (203). Garrison’s example of moving from a paper form for capturing statistics to an electronic form powered by a MySQL database is particularly instructive for librarians looking to cut down on the time needed to transcribe hand-written notes and tallies. She

concludes that documenting reference questions and consultations “immediately reflected the greater depth of reference services being provided,” as seen in the number of questions that asked for research help “beyond the lower undergraduate level” (Garrison 208-9).

A study by Hurst, Revelle, and Shrimplin makes important use of data beyond the reference desk. Their article, “Seeing the Forest by Counting the Trees,” looks at chat and in-person reference data, searches in popular databases, and their library catalog to find patterns and “indicators” of peak traffic times for library services and collections (435). The study makes sophisticated use of the academic calendar, comparing numbers from these disparate data sources over the course of a semester to visualize where the ebbs and flows of library usage patterns: “[b]y being aware of the relationship of the semester and academic calendar to usage of all types of library resources...service point staffing could be scheduled to match usage patterns” (Hurst, Revelle, and Shrimplin 447). At a time when many libraries are being asked to do more with less, the idea of dynamic staffing based on anticipated use is one that deserves further examination.

While not exhaustive, this literature review conveys the motivations for tracking reference and instruction activity cited by other librarians and provides a brief look at the methods used by other academic libraries to capture this data.

Recommendations

Background for Recommendations

The author proposes three actions that academic libraries can take to move beyond the basic tallying of reference questions or instruction sessions to gather useful, robust data on their public services. In brief, those recommendations are to find commonalities between reference and instruction data, to report that data in ways that make sense to stakeholders, and to employ basic techniques of statistical analysis. In order to contextualize these recommendations, it is useful to examine some of the practices at the author’s home institution, Bethel University in Saint Paul, Minnesota.

Bethel University is a private institution in the category of “Master’s Colleges and Universities (larger programs)” (*Carnegie Classification of Institutions of Higher Education*). The undergraduate student body is split between a residential, day-time baccalaureate population and students in an evening and online program geared towards adults pursuing degree completion. Additionally, there are several master’s degrees and a doctoral program in Education. All of these students are served by one centrally located University Library. The reference desk at the University Library is part of a bigger service point called the Information Commons (IC). In addition to a reference librarian, the IC also includes staff from the Teaching and Learning Technology team that supports the University’s course management system and a library technology student worker who assists with printing and computer troubleshooting. The reference service point is staffed by librarians six days per week.

Reference librarians are responsible for recording their interactions with patrons during their reference shifts in a web-based form. The form is powered by LibAnalytics, a product developed by Springshare. LibAnalytics allows for extensive customization, and the form

that Bethel University created for entering statistics asks librarians to provide information in several categories by choosing the relevant options from drop-down menus. At a minimum, the librarian should record: the patron type, the way in which the librarian was contacted (in-person, chat, phone, or email), and the approximate length of the transaction. There are additional drop-down fields to describe the type of information being sought (“Research help,” “Locate an item,” etc.), the resource or tool used to answer the question, and the subject area. These fields are optional since their relevance depends on the nature of the question. All fields have pre-defined choices, and the reference staff is asked each year to provide input on any updates that need to be made to the form.

A separate LibAnalytics form is used to capture the details of each information literacy instruction session, almost all of which are requested by faculty and relate to specific courses taught at Bethel University. The instruction form asks the librarian to provide the number of participants, the course number and department, the instructor, and the beginning and end time. This form is also used for individual appointments that students schedule with librarians for additional, one-on-one research help.

While LibAnalytics does have built in reporting and visualization tools, the author uses an export function to download the transactions in comma-separated value (CSV) files for analysis in Microsoft Access. Access is a database tool that enables different sets of data to reside in discrete tables within a larger, shared database. Those tables can then be linked to each other based on the existence of common variables, and those relationships can help ensure data integrity by insisting on a controlled list of data values in a process known as “referential integrity” (Rob and Coronel 70). In addition to data standardization, Access also has the ability to easily aggregate or describe one’s data based on selected criteria through the use of the programming language SQL.

After being recorded in LibAnalytics and ingested to Microsoft Access for the purpose of storage and aggregation, the data is sometimes exported to Microsoft Excel to be expressed in graphs or charts. It is important to note that while this process seems cumbersome, individual reference librarians are only responsible for recording their transactions in the web-based form. The remaining steps are performed by one librarian working with a well-documented protocol to ensure that the data is not lost, duplicated, or inadvertently altered through these stages.

Recommendation 1: Find Common Data between Services

One immediate benefit to the aforementioned model of capturing reference and instruction data is the ability to align data points that are shared by both of these services. Since information on Bethel University’s reference statistics includes the academic subject a student is inquiring about, it’s easy to see how the volume of reference interactions for a given discipline compares to the amount of information literacy instruction provided to that department. It’s worth noting that in some cases the data do not match perfectly. First, there are several questions at the reference desk where it’s not clear what the student’s major is, and secondly, the reference form’s discipline list is more generic than a complete list of degrees would be. Nevertheless, the majority of the questions for which an academic discipline is listed provide a good indication of the corresponding department.

By comparing the total time spent providing instruction to students of a given department and the time spent with the same department at the reference desk, Bethel University Library has been able to identify which departments are high-volume users of each service and consider instances where librarian outreach is needed. For example, if a department consistently has a high number of reference questions but little time spent in group instruction, the liaison to that department could reach out to faculty about scheduling a session on library research to provide help to more students in a group setting. Additionally, all reference staff should be prepared to answer questions from departments with heavy reference desk usage. The most convenient way to visualize the combined time on instruction sessions and research questions at the reference desk for a given department is to create a scatter plot, with each service represented on an axis (see fig. 1).

There are other important areas of overlap between reference and instruction that are useful for planning purposes. Chief among these is time. Aligning reference and instruction statistics allows one to see which times of year are the busiest for each service, which in turn gives librarians a clear sense of the “rhythm” of their semester that is otherwise hard to quantify. At Bethel University, the author noticed that the fall semester follows a clear pattern: Time spent on instruction peaks for the fall semester around the fourth week of classes, and research questions at the reference desk intensify approximately five weeks later. Each of the librarians at Bethel who cover the reference desk also have liaison duties, so knowing the general trend of busy times for each service allows librarians to anticipate when the two parts of their jobs might ebb and flow in intensity. Taking a holistic view of reference and instruction — one that finds common ground in the data that is gathered about each helps clarify the role that these services plays over the course of the academic year (see fig. 1).

Recommendation 2: Reporting Data in Relevant Ways

The second recommendation relates closely to the first: Academic libraries should report their reference and instruction data in ways that make sense for their stakeholders. Many audiences for academic library reporting are likely internal to the college or university, including library staff, library administrators, and possibly the offices of academic affairs or the provost. Presenting one’s data in a way that matches the frame of reference for these audiences can help to make the findings more immediately impactful.

Counting the aggregate number of questions answered at the reference desk or the total number of people attending a “presentation” given by the library, as requested by the most recent NCES Academic Libraries Survey, fails to adequately describe or contextualize these important library services (“Survey Changes” 14). While those tallies are relevant for the sake of a large reporting project, they may not have much meaning in a local setting, especially to university administrators outside the library.

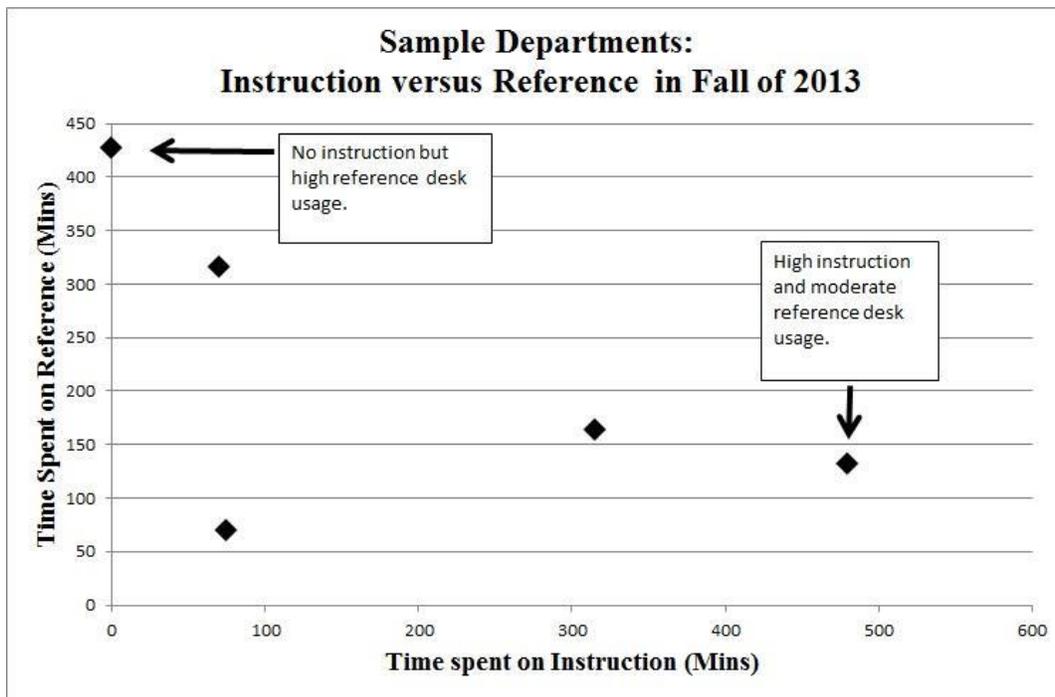


Fig. 1. Scatter plot of time spent on library instruction and reference help by department.

Adding context to reference questions can be accomplished in several ways, whether by using a classification system to gauge the complexity of questions, as discussed in Henry and Neville, or by documenting the form of communication and type of question outlined by Garrison. The author believes that libraries should capture the department/major and type of patron when possible, too. Due to the quick pace of questions during peak times at the desk, reference data can be difficult to record with total accuracy. However, it's easier to capture detailed information about a library instruction session, where there is clearly defined content and audience and the data does not have to be input by the librarian during the course of a busy reference shift. Adding detail to both types of statistics allows a library to compare the use of its services across groups, stratify the tallies into different levels of time or effort, and allow one's audience to have more reference points for the information being presented.

When using an electronic form, it's also possible to capture date and time information. Most web form applications and software-based databases allow for an automatic time stamp to be recorded at the moment an entry is made. Using Microsoft Access, the author was able to run queries on these time stamps in order to create detailed reports on reference desk activity during individual reference shifts. This data was used at a reference staff meeting to gauge whether the current three-hour blocks of desk time were splitting the reference duties in an equal way. It also made it possible to model how those questions would have been distributed if the timing of the reference shifts was adjusted. This report was arguably more meaningful to the reference staff than an annual report of the total number of questions answered because it conveyed information that reflected the experiences they had at the reference desk or in their teaching sessions.

For audiences outside the library, such as administrators in the offices of academic affairs or the provost, it can be helpful to have contextual information, too. Rather than simply

reporting how many patrons the library served in a given year, it's useful to be able to say what percentage are undergraduates, graduate students, faculty, staff, and other patron types. Likewise, knowing how many instruction sessions are taught and in which types of courses can help show the diverse ways in which the library contributes to the mission of the institution.

Recommendation 3: Employing Statistical Analysis

Data on academic libraries becomes particularly useful when it is easily digestible and relates to the day-to-day life of the library, as discussed in the previous recommendation. One way to make library data more demonstrative is to transform it with basic statistical tests and calculations. Ideally, one would hope that the data might have predictive value for forecasting future trends, but using statistics doesn't need to be that sophisticated. Consider the definition of "Descriptive Statistics" given in the *Concise Oxford Dictionary of Mathematics*: "The part of the subject of statistics concerned with describing the basic statistical features of a set of observations. Simple numerical summaries, using notions such as mean, range and standard deviation...are used to present an overall impression of the data." Giving an "overall impression" is a goal that is easily accomplished once the data has been gathered and properly organized.

In practice, a library could begin to calculate basic facts about their services using averages, ratios, and other simple equations without a great amount of additional effort. For example, with data about the number of instruction sessions and the length of each instruction session, it would be easy to determine the average duration of an information literacy class led by a librarian. Similarly, using the total number days in the semester and total number of reference questions, the library could report on average how many questions are answered per day, per week, or per semester.

One can delve further into statistical analysis to see how those averages might be impacted by outliers, or data points with extremely high or low values setting them apart ("Outlier"). Outliers can be identified by determining the standard deviation of a data set and then calculating standard scores or "z scores" for each data point ("Z Score"). The z-score indicates how far each data point is from the average in units of standard deviation; typically any data point that is more than two standard deviations from the average is considered an outlier.

To give an example, the fall semester at Bethel University is 16 weeks long. In fall of 2012, the average number of reference questions received in a week at the reference desk was 160 questions, with a standard deviation of 30. This means that most weeks should fall within two standard deviations of the average in either direction, in a range of 100 questions per week to 210 questions per week. Any week with more than 210 questions or fewer than 100 questions is outside the "normal" range of two standard deviations. As it happens, in the fall of 2012 there was an outlier week: During the week of Thanksgiving break, Bethel University's reference desk only received 66 questions. In fact, during every fall semester that the author examined, the week of Thanksgiving was a negative outlier. No other weeks from the fall semesters in the data set were outliers. This information is useful for two reasons: First, the recurring instance of an outlier in the data suggests that the library can plan

on a very slow week surrounding Thanksgiving each fall (which one would likely guess without looking at the data), and secondly, the library may want to consider removing this data point from its calculation of average weekly reference work. The extreme negative nature of that value skews the average lower than it would otherwise be, making it appear as though an average week is slower than it actually is.

Employing even basic descriptive statistics helps libraries to convey their data in meaningful ways and enables them to better appreciate the value of the information that they have collected. Several common software programs, including Microsoft Excel, have built-in formulas to assist with doing statistical calculations. The information gained from enacting this third recommendation puts the previous recommendations within a library's reach.

Conclusion

With academic libraries across the country facing flat or reduced budgets, it is essential that library staff and administrators communicate the many ways in which they serve students, faculty, and their communities. Several streams of data now exist for monitoring the use of collections and electronic resources, but it is important to keep good records of the work being done by librarians in the form of public services, too. Effectively tracking and communicating reference and instruction data helps to convey the varied nature of the work librarians do on a daily basis.

In order to communicate library and instruction data, the author recommends three things. First, libraries should find the common points of data that exist between reference and instruction services, so that those activities can be understood in relation to one another. Secondly, librarians should present their data in ways that have meaning to their audiences, with attention given to campus priorities or issues to which the data may relate. And finally, as a way to achieve these first two recommendations, libraries should explore the basics of statistical analysis as a way to help transform and describe their data. Doing so will help the academic library, and particularly services like reference and instruction, be better understood by audiences both within the library and beyond.

Works Cited

"About the Academic Libraries Survey." *Library Statistics Program: Compare Academic Libraries*. National Center for Education Statistics, n.d. Web. 26 May 2014.

The Carnegie Classification of Institutions of Higher Education. Home page. Carnegie Foundation for the Advancement of Teaching, 2010. Web. 30 May 2014.

"Descriptive Statistics." *The Concise Oxford Dictionary of Mathematics*. Ed. Christopher Clapham, and James Nicholson. 4th ed. *Oxford Reference Online*. Web. 6 June 2014.

Garrison, Judith S. "Making Reference Service Count: Collecting and Using Reference Service Statistics to Make a Difference." *Reference Librarian* 51.3 (2010): 202-11. Print.

- Henry, Deborah B., and Tina M. Neville. "Testing Classification Systems for Reference Questions." *Reference & User Services Quarterly* 47.4 (2008): 364-73. *Library, Information Science & Technology Abstracts*. Web. 15 May 2014.
- Hurst, Susan, Andy Revelle, and Aaron Shrimplin. "Seeing the Forest by Counting the Trees: Using a Variety of Data Sources to See the Big Picture." *Journal of Web Librarianship* 7.4 (2013): 434-50. Print.
- Lee, Marta, Jon Ritterbush, and Robert Sivigny. "Reference at the Commons: A Case Study." *Reference Services Review* 38.1 (2010): 81-9. Print.
- Nolen, David S., et al. "Moving Beyond Assumptions: The Use of Virtual Reference Data in an Academic Library." *portal: Libraries and the Academy* 12.1 (2012): 23-40. *Project Muse*. Web. 10 April 2014.
- "Outlier." *A Dictionary of Psychology*. Ed. Andrew M. Colman. 3rd ed. *Oxford Reference Online*. Web. 11 June 2014.
- Rob, Peter, and Carlos Coronel. *Database Systems: Design, Implementation, and Management*. 8th ed. Boston: Thomson Course Technology, 2009. Print.
- "Survey Changes: 2012 Academic Libraries Survey." *Library Statistics Program: Compare Academic Libraries*. National Center for Education Statistics 1-18, n.d. Web. 26 May 2014.
- "Z Score." *A Dictionary of Psychology*. Ed. Andrew M. Colman. 3rd ed. *Oxford Reference Online*. Web. 11 June 2014.

Google Scholar Metrics: A New Tool for Faculty to Track Their Publication Citations

Fu Zhuo
Research and Liaison Librarian
University of Missouri - Kansas City
Kansas City, MO

Abstract

Google Scholar Metrics is a tool designed to assist authors tracking citations of their scholarly publications. It collects recent citations to publications and makes authors more aware of where to publish their research papers.

Ever since this tool is launched, information researchers and librarians have been analyzing and questioning where Google indexes those publications and collects its data as well as how credible the data is. Their research found out that the citation numbers are higher during certain months and suggested that Google upgrade its rankings more frequently and that the results be displayed in each ranking proportionally to the number of journals indexed by language. This presentation will show how to get stated and where to look for the h-index number of publication citations.

"Let's Give This Tree a Friend": Channeling Bob Ross in Faculty-Librarian Partnerships

Laura MacLeod Mulligan
Information Services Librarian, University Libraries
Ball State University

Adam J. Kuban
Assistant Professor, Department of Journalism
Ball State University

Abstract

When faculty and librarians combine their energy and talents, they create a more dynamic research experience. The authors' interdisciplinary collaboration—in its third year—has afforded them opportunities to assess undergraduate student learning outcomes and course satisfaction, as well as participate in professional development opportunities outside their primary research areas. They propose a three-faceted conceptual framework for successful interdisciplinary collaboration that is non-discipline-specific.

Introduction

Librarians typically specialize in teaching specific concepts and skills related to information retrieval and evaluation, whereas faculty members are considered experts in their respective subject disciplines. Collaborating on instruction and research allows librarians to move beyond “the one-shot model” to create a more dynamic experience for students, where faculty provide the context that underscores the relevance and importance of research in a specific discipline. To name just a few positive consequences, it “increases productivity, maintains motivation, and stimulates creativity” (Austin & Baldwin 2).

With strong faculty support, librarians can become embedded in courses and make multiple appearances in the classroom, develop and revise assignments, review student output, and assess student learning (Yousef). This allows librarians' work to “extend beyond the traditional bibliographical instruction and resource procurement” (Beard 159) and gives them an opportunity to play a more meaningful role in the classroom. Faculty benefit from having a “personal librarian” to make research more accessible, ease students' anxiety, and develop library-related assignments. The result is that the best attributes of both are emphasized, and the students have the most to gain from such an alliance (Massis). The partnership also can lead to scholarly and professional-development opportunities if the collaborators have a strategy in place.

Such is the case with the authors of this proceedings manuscript—an information services librarian and an assistant professor of journalism at a public university in the Midwest. Their collaborative efforts began in January 2012 in order to revise the curriculum of an introductory journalism research course for undergraduates in the faculty member's department. This ultimately led to the creation of an innovative, technology-based capstone exercise that exemplified the nexus of screencasts with library database instruction. This

collaboration around curriculum development led to two conference presentations and one peer-reviewed publication.

Collaboration also affords opportunities for faculty and librarians to assess student learning outcomes in ways that measure student comprehension and perceived course satisfaction. Oakleaf, Millet, and Kraus insist that “faculty involvement is necessary [for librarians] to evaluate the lasting impact of information literacy instruction on student knowledge, skills, and abilities outside the library” (833). When faculty are on board, reaching past and current students to gather feedback becomes a less daunting task, and the assessment measures can be developed in a way that is discipline specific. The exercise becomes mutually beneficial for librarians and faculty wishing to revise and improve upon their teaching in future semesters (Brown & Duke). The authors of this paper conducted empirical research with students who completed the newly revised introductory journalism research course, and that manuscript has been submitted to a refereed publication. On a personal level, these academic initiatives have afforded the authors the opportunity to learn more about current topics and issues in the other’s discipline. Professionally, their collaboration has proven valuable in annual reviews and tenure considerations.

Academic buzzwords such as “interdisciplinary” and “collaboration” get paid ample lip service in university administration strategic plans, current scholarship such as literature from Brasley, Yousef, and Leeder, as well as online academic discourse by O’Meara and Poulos et al. The authors of this paper, however, wish to reveal their methods of collaboration—specifically what has given it longevity and made it successful. From evidence grounded in aggregate literature and personal anecdotes, the authors have developed a conceptual framework for effective collaboration that could apply to any interdisciplinary partnership.

Rationale

Scholars who collaborate rarely read literature about collaboration before they begin their scholarly endeavors. Even if one wanted to brush up on best practices for successful collaboration, one would have to wade through case studies and data surrounding discipline-specific scenarios, most of which emphasize the *process* of interdisciplinary collaboration as being as important as the eventual product (Amey & Brown). Despite the plethora of literature, “many in the academy and beyond still wonder how to engage in interdisciplinary study in a productive way” (Poulos et al.). The authors therefore begin this paper with a conceptual framework based on personal anecdotes (i.e., a “model-first” approach) simply because it is natural to begin collaboration in this fashion; the initial conceptual framework stems from opinions of a third-year journalism tenure-track assistant professor and fourth-year information services librarian—“what has worked for us.” The anecdotes are then corroborated by relevant literature concerning interdisciplinary collaboration. As the authors read others’ stories and studies and noticed patterns in what led to successful collaboration, they looked for areas of support as well as additional ideas/concepts/attributes that ought to exist as elaboration to their initial framework.

Personal Anecdotes

Looking back on three years of collaboration, the authors of this proceedings manuscript identified and organized a non-discipline-specific conceptual framework outlining the (1)

workplace conditions; (2) qualities/attitudes; and (3) common goals that have enhanced their collaborative, interdisciplinary experience and could thus serve as a model for any faculty-librarian partnership. To help unpack the importance of these three facets, the authors have sketched a visual depiction of the conceptual framework (see fig. 1) and also share personal anecdotes from their experiences.

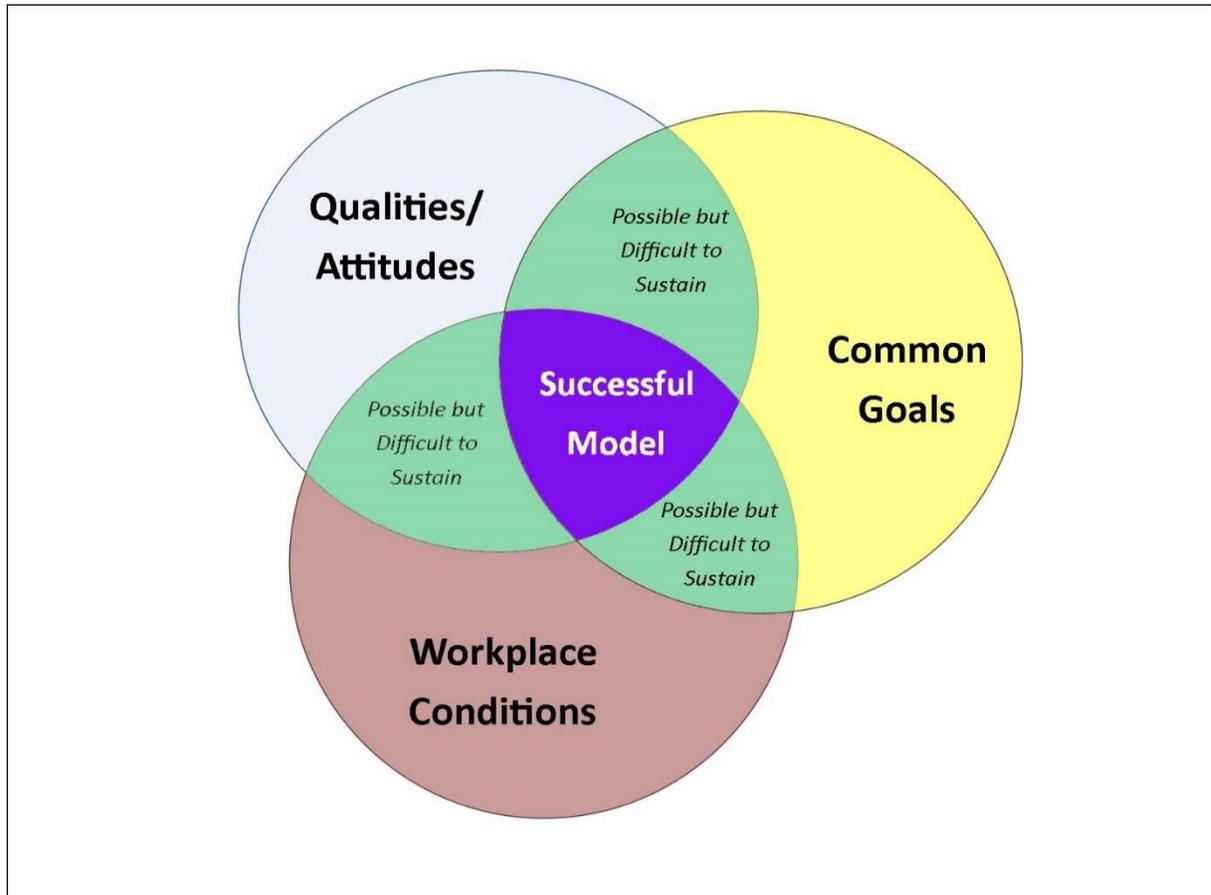


Fig. 1. The authors' conceptual framework for successful interdisciplinary collaboration.

The authors believe that successful collaboration results from a three-faceted framework, two elements of which can be controlled: (a) favorable attitudes and personality qualities toward interdisciplinary engagement and (b) common goals determined between the involved parties. The third element—workplace conditions—is largely out of the collaborators' control but still impacts the partnership. When all three facets come together, the authors believe successful collaboration can occur. In the event that one facet is absent or lacking, the authors believe that collaboration can still function but may be difficult to sustain.

Table 1 and the ensuing text further qualify each facet of this conceptual framework.

Table 1
Qualifiers for a Three-faceted Conceptual Framework for Successful Collaboration

Workplace Conditions	Qualities/Attitudes	Common Goals
<ul style="list-style-type: none"> • Regular communication • Standing meetings • Physical space • Administrative support 	<ul style="list-style-type: none"> • Cooperative — able to compromise • Equitable — respect for roles • Trust — perceived competence • Shared vulnerability — safe setting to explore, inquire & critique • Enthusiasm — desire to continue collaboration 	<ul style="list-style-type: none"> • Identify individual strengths • Select conference & publication venues that “count” for both, or alternate • Establish research “pipeline” & philosophy • Articulate/update timelines

Workplace Conditions

Essential to the authors’ collaboration has been regular communication—whether by email, text, Google Chat, or in person. Keeping a standing weekly in-person meeting throughout the year (including during summer sessions) has given the authors at least an hour if not two hours per week to touch base, bounce ideas off one another, strategize, delegate, and debrief ongoing tasks.

The authors discovered that meeting in an office allowed for too many interruptions; colleagues and students knocking or calling would disrupt the flow of the meeting and reduce precious time. Booking a conference room in the university library solved this problem and gave the authors a neutral space in which to talk, think, and work without distraction. Having a coffee machine, audio/visual equipment (including a projection screen and speakers), and a large table gave the authors opportunities to feel comfortable and well equipped for any task—whether it be critiquing student screencasts, sketching out a four-foot-by-eight-foot poster, drafting correspondence to journal editors, or working side-by-side on separate computers.

Arguably most important in this facet is apparent administrative support. Both authors are fortunate to have current superiors who embrace their collaborative endeavors, valuing it in subsequent reviews and evaluations. Without it, the interdisciplinary collaboration would likely end, as one or both authors might deem it too high-risk to continue.

These qualifiers may not be available to all who wish to pursue interdisciplinary collaboration; thus, this facet largely remains out of one’s control. However, the authors believe this represents a vital component and should be considered in the conceptual framework for successful, long-term collaboration.

Qualities/Attitudes

An interdisciplinary situation comes with a number of inherent differences, but the authors have found that if there are common emotional qualities, the collaborative relationship can remain collegial and productive. In the authors' experience, the following stood out as ideal qualities: a cooperative and compromising attitude; respect for and equitable treatment of individual collaborator roles; trust in one another's competence; ability to be vulnerable, open, honest, and willing to learn; and an enthusiasm for the projects pursued.

Due to the nature of a librarian's service-oriented role at a university, collaboration among faculty and librarians sometimes results in the librarian acting in a supporting role to help execute the vision of a faculty member. In this particular collaboration, the roles are refreshingly equitable, leaving each party feeling like a co-leader. Working as partners in making decisions, carrying out plans, and presenting the outcomes helps each partner feel like an essential part of the alliance. For example, the assistant professor would not finalize student grades in his introductory research course without receiving feedback from the librarian regarding their capstone projects (i.e., screencast database tutorials) in case there were incorrect aspects related to the library resources that she, as an information professional, could identify. In their collective opinion, the authors contend this arrangement sustains the momentum and collegiality longer than a leader-follower partnership.

Common Goals

Over time the authors have identified their respective strengths and developed a delegation of tasks that plays to their individual talents and interests but also results in reaching common goals. The authors have been able to identify professional development activities that "count" for both of them, and they alternate the focus of activities to make for an even distribution. For example, after presenting at a journalism educators' conference in summer 2012, the authors took a derivative of their material to a state library conference in fall 2012 to share their work with that audience. The authors refer to this as their "research pipeline" in which they alternate their efforts toward one discipline or another to keep their activities equitable and interdisciplinary. While research styles and philosophies differ from discipline to discipline, the authors discovered that they had similar interests in information literacy, critical thinking skills, student engagement, and assessment driven by qualitative data. Projects stemming from these research interests have been undertaken more easily because, from the beginning of their collaboration, the authors have had a shared enthusiasm for these pedagogical interests and research methods.

Literature Review to Support Framework

There is no shortage of literature concerning academic collaboration, including studies based on librarian-faculty partnerships (see Austin & Baldwin, Amey & Brown, Brown & Duke, Brasley, and Leeder). A variety of disciplines are represented in these texts, from science to music for example, but certain non-discipline-specific themes prevail throughout. In reading the case studies by other librarians and faculty members, the authors of this proceedings manuscript noticed certain aspects that reappeared: collaborators' workplace conditions, personal qualities and attitudes, and common professional goals that contributed to the

success of their partnerships. The subsequent literature confirms the authors' personal experiences.

When discussing the logistics of collaboration, Leeder notes that "it is not an easy task" and that "it requires shifting the ways we typically think about our jobs and being willing to embrace another's vision of our work" (1). Thomson also admits that it is "quite time-consuming. Working to monitor the course and adjust as needed throughout a term requires regular meetings and diligent deliberation" (36). In the case of a larger group of collaborators, Thomson finds it necessary to establish "a lead faculty member" to keep everyone in check (36). Brasley agrees, stressing importance of "agreement on who has ultimate responsibility and decision-making power for project components" (73). Amey and Brown also identify leadership as one of four dimensions in their model for successful collaboration. However, they contend that "servant" leadership is more productive than a top-down tactic, which supports the type of leadership evident in the authors' collaboration.

Bettencourt and Weldon recommend virtual communication in lieu of in-person meetings: "E-mails exchanged between [the co-teachers] illustrated challenges in communicating about changes when neither of us had time to meet together in person" (136). Leeder supports this point—"Communicate regularly to maintain the relationship" (6)—which may seem simple enough, but due to restrictions on time, staff, and funding, having a librarian subject-specialist to collaborate with might be viewed by faculty as "a luxury" (Massis 91) that is not as easily managed at every institution.

Nevertheless, once satisfactory conditions are established for collaboration, there must be a collegial and fair dynamic among collaborators. The literature often delves into specific personal qualities and attitudes necessary for a successful collaboration. Yousef asserts that "a key element of effective collaboration is knowledge of the attitudes of both" (1). Bettencourt and Weldon insist that collaborators must be able to be "accountable to each other and interdependent" (139) and conclude with the idea that a "strong mutual respect for and appreciation of each other is essential" (146). Leeder addresses this inferiority phenomenon: "Many librarians have an uneasy relationship with our faculty for a whole variety of reasons, not least of which are the different letters that follow our names" (1). Indeed, the perception of equal value to the partnership is essential for success. Among other qualities that Leeder offers: "Be bold; be friendly; be inquisitive . . . Be willing to give and take, consider other directions, or change the project completely . . . A professional collaboration is a negotiation" (3, 6).

Everyone wins when collaborators recognize and play to their own strong suits. "The desired consequence of any collaboration is a successful result that underscores the best attributes of both partners, thereby benefiting their audience" (Massis 92). Amey and Brown refer to this in their model for collaboration as "knowledge engagement," where parties identify their unique contributions and roles in the partnership (25). Bettencourt and Weldon go further to incorporate attributes unique to education, such as teaching style and discipline-specific knowledge: "The team-teaching idea rests on the premise that because teaching style and expertise vary, a team can offer different strengths from what a single instructor can" (145).

Not as evident in the literature is the idea that each partner might also do well to acknowledge their weaknesses to make room for growth in that area or as notice for the partner(s) to lead in those situations, which is why the authors note a willingness to be vulnerable as a noteworthy qualifier.

Also less discernible throughout the literature is any discussion of professional-development strategies. Brasley offers a generic statement to this point, acknowledging that successful interdisciplinary collaboration requires “a shared vision” (74). Leeder stresses that collaborators should determine conference and publication options that benefit both before embarking on any endeavor. Perhaps it requires no mention that apart from time-consuming curriculum development, assignment re-invention, student assistance, and other activities, librarians and faculty who author these publications about collaboration are devoting a significant amount of time and effort to planning, writing, creating, ultimately producing this scholarly output (including papers, presentations, and posters) to support tenure and promotion at their respective universities.

Table 2 reiterates the conceptual framework the authors of this manuscript proposed for successful interdisciplinary collaboration and enhances it with literature citations that corroborate the bulleted qualifiers. Most have scholarly support. The text that follows will discuss facets that are not already evident in the framework but perhaps should be included.

Table 2
Qualifiers—Supported by Literature—for Conceptual Framework for Successful Collaboration

Workplace Conditions	Qualities/Attitudes	Common Goals
<ul style="list-style-type: none"> • Regular communication <ul style="list-style-type: none"> ○ Thomson ○ Leeder ○ Bettencourt & Weldon ○ Larson & Begg ○ Amey & Brown • Standing meetings <ul style="list-style-type: none"> ○ Thomson ○ Bettencourt & Weldon • Physical space • Administrative support <ul style="list-style-type: none"> ○ Thomson ○ O’Meara ○ Amey & Brown ○ Teodorescu & Kushner ○ Poulos et al. 	<ul style="list-style-type: none"> • Cooperative — able to compromise <ul style="list-style-type: none"> ○ Leeder ○ Larson & Begg • Equitable — respect for roles <ul style="list-style-type: none"> ○ Leeder ○ Bettencourt & Weldon ○ Larson & Begg • Trust — perceived competence <ul style="list-style-type: none"> ○ Leeder • Shared vulnerability — safe setting to explore, inquire & critique • Enthusiasm — desire to continue collaboration <ul style="list-style-type: none"> ○ Yousef 	<ul style="list-style-type: none"> • Identify individual strengths <ul style="list-style-type: none"> ○ Massis ○ Brasley ○ Amey & Brown • Select conference & publication venues that “count” for both, or alternate <ul style="list-style-type: none"> ○ Brasley ○ Leeder ○ Larson & Begg ○ Austin & Baldwin • Establish research “pipeline” & philosophy <ul style="list-style-type: none"> ○ Bettencourt & Weldon • Articulate/update timelines <ul style="list-style-type: none"> ○ Leeder

Discussion

One noteworthy qualifier emerged in the literature that may belong in the authors' conceptual framework. This qualifier has not yet surfaced for the authors, which explains why it is not present in the previous tables and figure; however, it deserves mention in an ongoing effort to conceive an evolving model that reflects effective interdisciplinary partnerships. This phenomenon was prevalent in numerous sources that comprised the authors' literature review.

It seems oxymoronic that literature acknowledges the benefit of interdisciplinary scholarship, advocating that "it likely yields more innovative and consequential results for complex problems than traditional, individual research efforts" (Amey & Brown 30), yet institutionalized traditions within academia continue to stymie interdisciplinary efforts. Amey and Brown explain that graduate students who identify with a specific discipline spend years being socialized into that culture, "during which students learn the language, style, symbols, values, traditions, and folklore" (30) of their respective fields. Through that enculturation, students are trained by their faculty peers, who instill in them a deep respect for and appreciation of the experts they wish to become. "University and disciplinary reward systems, often based on a particularly narrow set of sanctioned behaviors, reinforce these graduate school socializations, keeping many faculty members organizing their work within narrow bands of perceived acceptability" (30). In other words, future faculty members are taught to maintain a particular research identity lodged within the confines of their discipline.

In a qualitative study where Teodorescu and Kushner conduct in-depth interviews with 75 faculty members—at different stages in their careers—from various schools and disciplines, results reveal that interviewees understand the *theoretical* benefit from interdisciplinary collaboration but feel compelled to abstain from it until after tenure. Untenured junior faculty in particular view interdisciplinary collaboration as a high-risk activity, or something that they should avoid until after they attain the security associated with tenure. Participants in this study identify incentives such as "funding for sabbaticals and for research travel, joint [teaching] appointments, and recognition in the promotion and tenure system" to encourage interdisciplinary pursuits (5). KerryAnn O'Meara, an associate professor of higher education at the University of Maryland, issues a similar call to action via an essay written for *Inside Higher Ed*: "Let's not assume all candidates must make their case for tenure and promotion based on one static, monolithic view of scholarship."

Similarly, library-science programs may not adequately prepare their students either for interdisciplinary endeavors. Leeder notes that "librarians are not initiated into [their] fields in the same way that faculty are: by reading scholarship, identifying [their] own specific area(s) of specialization, presenting at conferences, and building a network of colleagues whose interests overlap" (2). Thus, future library scholars may not know how or be willing to engage faculty.

As a discipline-specific example, Larson and Begg created and implemented a graduate-level course "designed to assist learners to understand why and how different professional disciplines must work together to generate and disseminate knowledge" (2). This course, comprised of lectures, readings, and case-study analyses, requires a capstone project where students apply their newfound interdisciplinary knowledge and skills toward a health-care problem that they research and for which they eventually design a hypothetical study with peers from different disciplines.

This phenomenon could fit under the “workplace conditions” facet of the authors’ conceptual framework, as this socialization and resultant reinforcement of bias toward discipline-centric scholarship could be viewed as out of one’s control. Without administrative support, the authors contend that collaboration will be difficult to sustain or achieve successful results. However, it may also be suitable in the “attitudes” facet of the framework, as a lack of preparation for interdisciplinary scholarship could lead potential collaborators to not trust their colleagues or compromise with them. Instead, they might deem their discipline as superior, which would make it difficult to express any vulnerability in an attempt to solve problems and work together toward solutions.

Conclusion

Postsecondary educators and university librarians want students ready for an integrated marketplace. Programs of study require students to complete coursework outside of their chosen major(s). Pedagogical praxis via experiential, immersive, and/or service learning often exists as a focal point of discussion at conferences about college teaching. It seems that, as educators, we recognize the globalization of society and the overlapping nature of most occupations. We want our students to have diverse, interdisciplinary experiences, thus it seems prudent to adopt a similar mindset for our own scholarly endeavors. The authors posit that we should set an example for our students, valuing efforts to “reach across the aisle” and emphasizing interdisciplinary opportunities.

The authors believe the conceptual framework available in this proceedings manuscript—grounded by personal anecdotes and substantiated by current literature—could assist others as they begin to embark on interdisciplinary initiatives. This is how the framework exists now as the authors envision it. In time, facets and qualifiers will evolve, transforming the notion of what equates to successful interdisciplinary collaboration.

Works Cited

- Amey, Marilyn, and Dennis Brown. “Interdisciplinary Collaboration and Academic Work: A Case Study of a University-Community Partnership.” *New Directions for Teaching and Learning* 102 (2005): 23-35. *Professional Development Collection*. Web. 15 May 2014.
- Austin, Ann, and Roger Baldwin. “Faculty Collaboration: Enhancing the Quality of Scholarship and Teaching.” *ERIC Digests* (1992): 1-4. Web. ED347958. 15 May 2014. <www.eric.ed.gov>.
- Beard, Regina M. “K-State Grant Opportunities Encourage Librarian/Faculty Collaborations.” *Collaborative Librarianship* 2.3 (2010): 154-158. *Library Literature & Information Science Full Text*. Web. 2 July 2012.
- Bettencourt, Michelle L., and Alice A. Weldon. “Team Teaching: Are Two Better Than One?” *Journal on Excellence in College Teaching* 21.4 (2010): 123-150. *Print*.
- Brasley, Stephanie. “Effective Librarian and Discipline Faculty Collaboration Models for Integrating Information Literacy into the Fabric of an Academic Institution.” *New*

- Directions for Teaching and Learning* 114 (2008): 71-88. *Academic Search Premier*. Web. 15 May 2014.
- Brown, Jennifer, and Thomas Duke. "Librarian and Faculty Collaborative Instruction: A Phenomenological Self-Study." *Research Strategies* 20 (2006): 171-190. *ScienceDirect*. Web. 20 May 2014.
- Larson, Elaine, and Melissa Begg. "Building Interdisciplinary Research Models: A Didactic Course to Prepare Interdisciplinary Scholars and Faculty." *Clinical and Translational Science* 4.1 (2011): 38-41. *Academic Search Premier*. Web. 25 June 2014.
- Leeder, Kim. "Collaborating with Faculty Part 1: A Five-Step Program." *In the Library with the Lead Pipe* 3.4 (2011): 1-7. *Library Information Science & Technology Abstracts*. Web. 15 May 2014.
- Massis, Bruce E. "Librarians and Faculty Collaboration: Partners in Student Success." *New Library World* 113.1-2 (2012): 90-93. Print.
- Oakleaf, Megan, Michelle S. Millet, and Leah Kraus. "All Together Now: Getting Faculty, Administrators, and Staff Engaged in Information Literacy Assessment." *Libraries and the Academy* 11.3 (2011): 831-852. *Project MUSE*. Web. 26 September 2013.
- O'Meara, KerryAnn. "Essay Calls for Reform of Tenure and Promotion System." *InsideHigherEd.com*, 13 January 2014. Web. 25 June 2014.
<<http://www.insidehighered.com/advice/2014/01/13/essay-calls-reform-tenure-and-promotion-system#sthash.gXVKZdeF.dpbs>>.
- Poulos, Helen, Bryan Bannon, Jeremy Isard, Phoebe Stonebraker, Dana Royer, Gary Yoha, and Barry Chernoff. "The World through an Interdisciplinary Lens." *Association of University Professors*, September/October 2012. Web. 25 June 2014.
<<http://www.aaup.org/article/world-through-interdisciplinary-lens#.U8gzg5RdWSo>>.
- Sanborn, Lura. "Perspectives on Improving Library Instruction: Faculty Collaboration." *The Journal of Academic Librarianship* 31.5 (2005): 477-481. Print.
- Teodorescu, Daniel, and Carol Kushner. "Trailblazing or Losing Course? Views of Interdisciplinary Scholarship at Emory." *www.emory.edu*. Emory University Office of Institutional Research. Web. 15 May 2014. <http://www.emory.edu/ACAD_EXCHANGE/2003/octnov/teodorescukushner.html>.
- Thomson, Alexander. "Faculty Collaboration: Creating Multidisciplinary Learning Communities." *The Community College Enterprise* 13.2 (2007): 27-38. Print.
- Yousef, Atif. "Faculty Attitudes toward Collaboration with Librarians." *Library Philosophy and Practice* 12.2 (2010): 1-15. *Library, Information Science & Technology Abstracts*. Web. 25 June 2014.

From Reactive to Proactive: Cross-Departmental Collaboration to Minimize Access Interruption Reports

Ruth A. Light
Electronic Resources Access Manager
Indiana University

Abstract

In this era of electronic resources, the ability to consistently access material is of utmost importance. Access interruptions, from broken links to underperforming link resolvers, not only sour the user's experience with the library's digital collections, but also impact the return on investment for the electronic resources the library has purchased, leased or subscribed. With the costs so high and manpower limited, it is imperative to find ways to work smarter rather than harder in handling access problems.

This presentation and paper will address key ways that Indiana University Libraries' Electronic Resources Acquisitions unit has looked to other departments within the library not only to correct reported access interruptions, but also proactively discover problems before they become a hindrance to the Libraries' users. Using everything from anecdotal comments by subject librarians about items missing from the catalog to interlibrary loan reports can help discover a plethora of missing access points, link resolver problems, discovery layer errors, and other complications to access before they can impact the mission of the library.

Introduction

As a large research institution, Indiana University has relied increasingly on electronic resources to provide students, researchers, faculty, and staff with the information they need to succeed. Users of all sorts have come to expect instantaneous gratification for their data needs, both when it comes to research and to everyday desires such as the address for a local coffee shop. If the resource does not work, the user is left with a sense of frustration and a handful of options, including: contact the library for assistance, try to find the material elsewhere (perhaps using a search engine or illegal file-sharing site), or simply give up. Any of these can have undesirable repercussions. Contacting the library can be time intensive if the library staff must ask numerous questions to pinpoint the problem and then wait on the resource provider to make corrections on their end. According to a study at Illinois State University, even library employees were unlikely to report access problems due either because they were unsure who to contact, did not think it could be fixed, or because it took too much time to report (Foster and Williams, 130). Additionally, frustration with library resources could result in its abandonment as an information resource. Looking elsewhere may lead to disreputable sources and websites with inaccurate information or illegally obtained content that could put the user at risk academically as well as legally.

Recent literature from academic libraries has focused on correlating electronic research usage and academic achievement. Cherry, Rollins and Evans, for one instance amongst many, found a small but statistically significant correlation between the use of electronic resources and GPA at their home institution (392). Giving up on library resources will not only have an academic impact on the user but reduce the effectiveness and efficiency of academic

production across the university as a whole if it becomes a common event. These potential outcomes are a persistent concern for the reference and electronic resources staff at Indiana University.

According to internal acquisitions statistics compiled for the Association of Research Libraries (ARL) Statistics, 70.4 percent of the Indiana University Libraries materials budget was spent on electronic resources in the 2012-2013 fiscal year. Recognizing that access interruptions could place an ever-increasing portion of their holdings at risk of being rendered unusable, the Indiana University Libraries created a new position for the Electronic Resources Acquisitions (ERA) unit, the Electronic Resources Access Manager, in August 2013. Previously access problems were handled by ERA procurement staff that had to balance access interruption reports along with their other duties. While they were able to manage the tide of reports, this served as a small bandage on a larger problem. By creating a position solely focused on e-resources access, more time and expertise could be directed toward not only solving reported problems, but also seeking out problems before they interrupted the work of library users.

Understanding Access versus Understanding Users

The ERA unit at Indiana University is charged with both procuring and ensuring continued access to electronic resources, and is situated in the Libraries' Technical Services department. This placement is ideal for the acquisition of new resources, but poses some challenges when it comes to access. ERA staff are deeply entrenched in the background of the various e-resources purchased. Between pricing research, licensing procedures, and the final activation of the e-resource in content management systems, the staff develops a familiarity with the "best" way to access a particular resource. However, this learned "best" way is not necessarily the way that library users access the resource.

Additionally, while ERA staff members are responsible for the management of the Library's electronic resources A to Z list, our open URL link resolver knowledgebase, and ERM, as well as some bibliographic record details, these are not the only access points for electronic resources. Subject and specialized branch librarians maintain research guides that link to library resources. Course management systems, LibGuides, university web portals, course syllabi, and outside resources like Google Scholar to greater or lesser extents fall outside the realm of ERA management.

Without everyday interaction with students and faculty, the ERA unit is removed from user thought processes in finding and accessing information. This includes not only how patrons might use the resource, but how they will locate it. In order to better understand users without sacrificing time and human resources that are not available, the new access manager began cultivating relationships with other Indiana University Libraries' departments who have closer connections to library patrons and their alternative methods of accessing electronic resources.

Reference Anecdotes & Implications on E-Resource Access

At many academic institutions, collaboration between reference services and technical services has become a way of life for electronic resource management. Poe and others

detailed a collaborative workflow in their chapter of *Electronic Resource Management in Libraries* that represents a model very similar to that of Indiana University Libraries: reviewing resources, licensing and procurement, administrative set up (e.g. activation and user interface customization), description for the catalog and A to Z e-resources list, and marketing resources (76). With so much connected work in electronic resource management at Indiana University, it was natural that further partnerships began developing between the ERA unit and reference desk staff as more time was made available for proactively investigating access issues. Most Indiana University librarians have collection management and academic department liaison duties that lead to a strong familiarity with e-resources in their subject areas. Additionally, the librarians and staff at the physical and virtual reference desks are the frontline for student and faculty questions, including the reporting of access problems.

The access interruption reports from the reference desk are handled as promptly as possible by ERA staff to restore access quickly. Such reactive workflows have their uses, but do not always get to the root of some problems. However, examining these one-off reports can bring much more to light, especially if the reference librarian has a vested interest in working with the electronic resources team. For example, the mathematics librarian at Indiana University Libraries reported that the link resolver did not work with a particular book series in an important mathematical citation database. The link resolver indicated that full-text was not available even though the library maintained a subscription to the series. Taking this as an isolated issue, ERA staff members could have simply resolved the problem with one particular volume of the series. Instead, this problem (as well as the librarian's expressed concern that other e-resources possibly would not work in the citation database) was used to discover that the selection of materials in the link resolver's knowledgebase was incomplete. This report not only helped the ERA unit better understand the link resolver knowledgebase and correct problems with the originally reported e-series, but also to discover other book series that needed to be corrected before users were inconvenienced.

Developing a relationship with those who work at the reference desk can have additional benefits. By resolving access interruptions quickly and demonstrating eagerness to improve the experience of library patrons, ERA staff members have earned the trust of reference librarians. Pan, Bradbeer and Jurries wrote about the need of treating the librarians on the frontlines as stakeholders (348), a perspective that the ERA unit has followed closely as well. As the ERA staff members have gained the trust of the reference staff, they have become more likely to report other things that appear to be amiss to the ERA unit. For instance, a subject librarian noted that several e-books were missing from the library catalog. Access points were still available via a link to the publisher platform in our e-resource A to Z list, but many of the tools designed to inform the users about these resources, such as the catalog or e-journal portal, had no information about them. The first question that needed to be answered in ERA was whether we should have access to those e-books. The next was to determine why they were not in the catalog. The conversation about a handful of missing titles led to the discovery of a large collection of e-books that were licensed to the Libraries but whose metadata records were never loaded due to a miscommunication between the providers of the link resolver/ERM product and the e-book publisher.

Not every problem has a set resolution, but learning about users' struggles through conversations with reference librarians has broadened the ERA unit's awareness about how resources are being used. This information can be used to improve internal troubleshooting documentation which in turn can be shared with reference staff. While the Libraries are open extended hours, the ERA unit maintains standard business hours. By providing temporary fixes for problems that can be worked around, the reference staff are able to help their users immediately and then provide ERA with the details to correct the problem during normal staff hours.

In addition to Reference Services, Indiana University (IU) also has a Discovery and Research Services (DRS) department which falls under the purview of public services but is also closely connected to the library and university IT departments. DRS manages the library website and discovery layers, and is an important ally in improving access to e-resources. The librarians and staff field virtual access interruption reports from the website and other virtual tools (such as EBSCO Discovery Services [EDS] and the catalog) as well as contribute to reference desk staffing. Additionally, they work closely with the User Experience and Digital Media Services department serving as a bridge between ERA staff and those handling digital projects at IU.

DRS and ERA have an interesting relationship as both units are working toward many of the same goals from different directions. Additionally, both units contribute to the management of EDS, the catalog, the e-resources A to Z list on the library website, and the user interface of the link resolver. By tapping into each other's through processes, both units have learned how some library interfaces do not work as expected. As a case in point, when the Blacklight discovery interface was added to the library catalog, DRS advertised permalinking capabilities that had not existed in the previous catalog. However, ERA discovered that due to the bibliographic loading processes, the permalinks were not permanent for many of our licensed e-resources. Once informed of that setback, the DRS department has scaled-back discussion of permalinking as a selling point for the catalog. However, it has also sparked conversations with the ERA unit and other relevant stakeholders to seek out a solution to this drawback. While this particular situation has not been resolved, it is now a known quantity for which a resolution can be sought.

Catalogers as Unbiased Access Testers

Although Indiana University catalogers often have even less interaction with library users than the ERA unit, developing a relationship between the units can result in a better experience for users of the library catalog as they seek out e-resources. Catalogers have a well-earned reputation as being very detail-focused. It is an important quality to have in a career that describes the broad and the minute for library resources. Additionally, in order to accurately describe an electronic resource, they must first access the resource. This provides a fresh set of eyes to a resource to not only confirm that it works, but to ask questions if it was not what they expected to see. Establishing close ties with the cataloging unit has given the ERA team the opportunity to fully benefit from the expertise and attention to detail that catalogers bring to their work. It also means that the questions a cataloger might have about a resource are more likely to be asked rather than pushed to the background in order to complete the work at hand. Catalogers at Indiana University have helped ERA staff to

identify incorrect URLs, resource title changes, as well as changes in the expected scope of licensed products.

Also, as Pan, Bradbeer and Jurries have noted, some staff assume a broken link in a catalog record is a cataloging problem rather than an access interruption and route their questions accordingly (347). This is especially true of those who are not associated with the libraries and are not aware of e-resource help desk contacts. The strong relationship that ERA has worked to establish with the cataloging unit has helped to ensure that those issues are reported to ERA so that non-catalog access points can also be updated with new URLs. Additionally, when other questions about the catalog come along catalogers notify ERA because they know that it could impact the work of the unit. For example, a question from the scholarly publishing unit in the libraries brought to light that some campuses had catalog records for the open access journals published by the department but not others. Rather than just add bibliographic records for the missing campuses, the cataloger called a meeting with the access manager and a staff member from the publishing unit to best pursue access to the resources at Indiana University as well as promote open access availability to outside institutions. A quick stop-gap measure could have been used but instead the units were able to work together to provide an even better solution.

IT Staff & Library Resources

After reference desk librarians and staff, IT professionals are likely to have the most interactions with library resource users and learn about their access problems. Due to the plethora of access points on non-library websites/web tools (e.g. course management systems, syllabi, and departmental websites), users do not always approach a resource with the thought that it is managed by the library. Instead, they pass these problems to IT staff who may be able to resolve problems if the user is trying to access a resource off-campus without authentication, but otherwise might be at a loss. Since non-library IT staff members are outside library workflows, they may not be familiar with some of the intricacies of e-resource licensing and availability, making them akin to the students and faculty members they are trying to assist. This provides an informed and yet user-centric point of view that deep-rooted library staff might slowly lose over time.

Developing a relationship with IT staff can lead to the discovery of previously unreported access problems. In one case at Indiana University, an IT specialist contacted the ERA unit to discuss an e-resource deemed critical to IT employees as well as students and faculty in the School of Informatics and Computing. The access points to the resource were inconsistent and caused confusion for users. Because most of the bibliographic metadata was controlled by an automated workflow, library staff members were unaware of the inconsistencies that had cropped up in the catalog records. We were able to make the necessary adjustments, as well as establish a new IT contact who has continued to bring forward e-resource concerns that he has encountered in his duties.

Additionally, building these relationships with IT staff has also led to more information (and earlier, in some cases) about potential changes in the technology structure at the institution that could affect access and ERA workflows. The more time e-resources staff members have to prepare for such changes (e.g. IP range changes, upcoming changes to the management of

proxy or VPN servers, etc.) the better they will be able to make the changes appear seamless to library end users.

Interlibrary Loan: Collaborators in Unexpected Places

It stands to reason that reference desk and IT staff might have some insights on electronic resource problems, but there are often unexpected collaborators “hidden” in the library. At Indiana University, staff members of the Interlibrary Loan (ILL) and Document Delivery Services department have joined the ERA unit in its mission of repairing broken access points before they are reported by users. Some of the insights provided by the department also led to a large-scale project to improve the openURL resolver knowledgebase.

With early friction from publishers regarding the interlibrary loan of electronic resource, it is easy to forget just how much interlibrary loan and document delivery staff use the library’s e-resources—and how much knowledge they have about broken or “quirky” access points. At Indiana University, ILL staff members first check for full-text holdings for any borrowing requests before seeking lenders. Additionally, more e-journal publishers have opened interlibrary lending of articles which the ILL staff uses to fill lending requests.

ILL staff members have provided us with a plethora of access information. Access interruptions and incorrect holdings were obvious items to report to our help desk, but our collaboration has gone further through broadening our understanding of each unit’s workflows. The ILL staff now also notifies us when a freely accessible resource is listed for regional campuses but not the main campus at Bloomington. This lets us know that the resource is wanted by users and worth activating in our knowledgebase for MARC records and openURL link resolution. They also notify ERA when they discover unexpected access to a resource so that we can research whether it is included in our license and access points should be added.

Additionally, after realizing the boon their various monthly reports could be, they now provide ERA staff with the “cancelled full-text” report every month. This report provides information about article/chapter requests from IU users which were requested through ILL but were already available via our e-resource holdings. Initial evaluation of the reports since August 2013 suggested that approximately 30% of the requests could be associated with some sort of access problem, typically a failure with the link resolving software due to inaccurate knowledgebase information. Based on the knowledge gained from the initial reports, we instituted a large-scale knowledgebase cleanup project focused on activating past titles and ISSNs for subscribed journals as well as checking the listed holdings against our actual access. When time allows, the access manager also goes through the reports line by line to correct specific problems based on the cancellations. This work has brought to the foreground problems with confusing user interfaces and various settings problems that needed to be addressed with our link resolver. The majority of these problems were never reported to the ERA help desk as access interruptions, so it was only through these ILL reports that the ERA team ever realized that the issues existed.

Conclusion

Electronic resources are an invaluable part of library collections. However, there are numerous problems that can occur when students, faculty, and staff attempt to use these resources. By developing strong relationships with other library (and non-library) departments, the ERA staff at Indiana University have learned more about how library patrons are using resources and therefore shifted from mostly reactive access problem resolution to proactive resolution. Sharing knowledge both ways has helped to strengthen bonds with the collaborative departments and find additional support for future changes that will benefit library users. Moving forward, the ERA unit will look into formalizing these partnerships as well as analyzing data collected on access interruptions to see if the informal, organically born relationships during the first year of the Electronic Resources Access Manager position have had a significant impact on access issues.

Works Cited

- Cherry, Ed, Stephanie Havron Rollins and Toner Evans. "Proving Our Worth: The Impact of Electronic Resource Usage on Academic Achievement." *College & Undergraduate Libraries* 20.3-4 (2013): 386-398. Web. 6 June 2014.
- Foster, Anita and Sarah C. Williams. "We're All in this Together: Library Faculty and Staff and Their Reporting of Electronic Resource Problems." *Journal of Electronic Resources Librarianship* 22:3-4 (2010): 124-143. Web. 25 June 2014.
- Pan, Denise, Gayle Bradbeer and Elain Jurries. "From Communication to Collaboration: Blogging to Troubleshoot E-Resources." *The Electronic Library* 29.3 (2011): 344-353. Web. 6 June 2014.
- Poe, Jodi, et al. "Sharing the Albatross of E-Resources Management Workflow." *Electronic Resource Management in Libraries: Research and Practice*. Eds. Scott Breivold and Holly Yu. Hershey: Information Science Reference, 2008. 71-89. Web. 30 June 2014.

Evaluating Search All: Custom Discovery Search Tool

Sarah G. Park
Technology and Engineering Librarian
Southern Illinois University Edwardsville

Abstract

Many academic and public libraries are rapidly embracing discovery tools which empower users to search and find various resources available through the library. Several libraries have taken extra steps to develop a customized search tool, integrating local collections and discovery tool layers. While discovery tools and custom search interfaces are promising for a “Google like” simple interface for many younger generation users, its effectiveness has not been much evaluated.

This presentation focuses on the strategic initiative, developmental experiences and interaction data collected on Google Analytics for “Search All,” Northwest Missouri State University library’s integrated discovery tool, using the Summon® Service from ProQuest. Findings include various user preferences on search tools and result pages. The presenter will also discuss the effectiveness of discovery tools and suggest improvements to current interfaces.

Channeling Your Inner Leader: Library Project Management for All

Corie Dugas
Assistant Professor, Outreach & Public Services Librarian
Saint Louis University School of Law

Abstract

Project management was initially developed for the field of engineering, not libraries. Complex systems such as Gantt charts and Program Analysis and Review Techniques (PERT) were used to work through the stages of project management. These intense processes are often too much for library staff members that are balancing projects in addition to their daily responsibilities. This paper will examine project management through the lens of a library by adapting plans, forms, and expectations to align with library needs.

Four stages of project management are highlighted: concept, plan, execute, and conclude. Within each of these stages, consideration is given to assembling and motivating the project team. Tips on conducting effective meetings, setting priorities, divvying up responsibilities, and monitoring the project through the use of forms are included. Ultimately, the project should be closed-out and a formal evaluation should occur. The purpose of this paper is to define project management in a way that is applicable to academic librarians and library staff and to help create a simple, realistic process for project management in libraries.

Introduction

The phrase project management has been receiving more traction in recent years. While the planning and implementation of projects were previously completed by dedicated project managers or top-tier administration, delegation and understaffing have forced new, untrained employees to take on this responsibility. The goal of this paper is to explain library-specific project management in a straightforward way that helps new managers understand the definition of a project and how to work the project concept, plan, execution, and conclusion into an overall workable strategy. Throughout the paper the author will refer to the creation of forms for each project manager to use. Each of the four stages should be documented by the initiator, project manager, or sub-project manager. Figures throughout the paper will show versions of these forms; however, they are also available at <http://bit.ly/TLT0HX>. These forms can be used in their present configuration or adapted to the needs of any library.

Before jumping into the planning phase, the most basic element of project management is determining if the task is a project or an ongoing operation. The remainder of this paper deals only with the planning and evaluation of projects, not ongoing endeavors. Kim Helman insists that the answers to five basic questions will help determine if the charge is classified as a project (3).

1. Does the project have a definite beginning and end?
2. Is it temporary?
3. Does it produce something unique?
4. Will resources (monetary or personnel) be dedicated to it?

5. Is there a way to determine if it has been completed?

A project should receive “yes” answers to all of these questions. This quick verification should be done before additional steps are taken. If questions receive a “no” answer, consider that this may be an ongoing enterprise and approach it in another way.

Concept

All projects begin with an idea. This may be an idea from a library staff member, or it may be an idea that has been passed down from University administration. The first step in molding this idea into a project is to formulate it into a concept. The idea itself may be rather simple, for example, starting a Twitter page for the library. However, it has to be examined to determine if it is a valuable pursuit. Using a Project Request Form will help flesh out the project’s importance. Each library may choose to design project forms using more or less information. The guidelines provided by the author are basic suggestions to assist with generating forms such as the Sample Project Request Form (see fig. 1).

Using five basic categories, the person requesting the project is able to clearly and concisely state why the project should be completed. Figure 1 shows a sample request form that uses these five groupings of information: description, explanation, project costs, time frame, and team members. The description should come from the idea and should state the initial idea along with objectives for the project. The explanation must answer the question: what is the problem? There has to be a current or pending issue that this project aims to correct. Joseph Heagney highlights the problem-based approach in his text on project management, “The way you define a problem determines how you will solve it, so it is critical that a proper definition be developed...” (45). The problem should be clearly defined in the description. The Twitter creation project may include an explanation that addresses the problem by indicating that undergraduate students are not using Facebook as much as they used to. The problem of the library’s failing marketing efforts would be addressed by adding a Twitter page.

The three remaining considerations should be more general. Cost should include both monetary and personnel time costs. At this stage in the project, these should be very general as no analysis has been completed. The focus of the time frame in the request should be the critical completion date and the reasons why it is critical. Team suggestions are optional at this point. However, if the requester is the person who came up with the idea, he/she may have thought of someone who would uniquely fit on the team. This should be included in the plan. At this point, the project must be approved. Who approves the project will be different for each library. The Sample Project Request Form (fig. 1) indicates signatures from the Library Director and Project Management Coordinator, but these can be adapted for the needs of each individual library.

PROJECT REQUEST FORM	
<p>General Information:</p> <p>Project name: _____</p> <p>Requestor name: _____ Date of request: _____</p> <p>Description: List the objectives of this project.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Explanation: Specify problems or issues within the library this project directly impacts. State the negative impacts to the library if not completed.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Costs: Offer general estimates of the cost (both financial and personnel) of the project.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Time Frame: Propose a desired or critical completion date. Indicate the rationale for the timeframe.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Team: Indicate any library staff or outside stakeholders that should be considered as members of the project team. (OPTIONAL)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Approval: To be completed by the review committee.</p> <p>Date of review: _____ Approved: Y / N Priority: _____</p> <p>Comments: To be completed by the review committee.</p> <p>_____</p> <p>_____</p> <p>Signatures:</p> <p>_____</p> <p>Library Director Date</p> <p>_____</p> <p>Project Management Coordinator Date</p> <p>_____</p>

Fig. 1 Sample Project Request Form

Plan

The Project Request Form puts all of the important elements of an idea into a request. Once the request has been approved and signed, it is time to move on to planning for the project. The next step requires determining who the project manager will be. Some libraries may have a set project manager or project coordinator. Other libraries will choose different individuals to lead each project. Regardless, the project manager is not always the person who initially came up with the idea, or even the person who created the Project Request Form. Ideally, the project manager will have experience with and interest in the project. One must not underestimate the importance of people skills in a project manager. According to Heagney, this is the most important qualification of a project manager. Additional helpful qualifications include understanding of the mission of the library, decisiveness, and knowledge of general management principles (Heagney 31). Once in place, the project manager will consider how to plan for the project. A useful tool in the planning process is a Project Agreement Form (Fig. 2). This form will take the initial concept and develop it into a plan for action.

The Agreement Form carries over three of its categories from the Request Form: description, costs, and team. Their continuation allows for greater examination and evaluation. This form also adds goals and priorities to the list. The Request Form includes a description of objectives for the project. The Agreement allows those previously stated objectives to be refined or reworked to fit the project as it now exists. Heagney’s text on project management notes that a properly stated objective should “define the desired end result” (49). He also

encourages use of the acronym SMART – Specific, Measurable, Attainable, Realistic, and Time limited when considering objectives (Heagney 50). Transferring these objectives to the second form should assist the project manager in formulating the objectives more carefully.

The second suggested addition to the Project Agreement Form is the use of goals. Using the SMART ideal, these goals should be measurable and attainable. Managers can choose broad-based goals or very specific goals depending on the needs of the project. If the project is to create group study rooms within the library, the goal of creating a comfortable space for students may be a key concern. However, the team has to consider how to measure the comfort of the rooms. If they choose to conduct surveys of students using the rooms that include a section on comfort, this could be a measurable and attainable goal. The priorities section sets the team up for the actual project work. Setting priorities forces the manager to consider what sub-projects are needed and which should be completed first, second, and so on.

Both the costs and team sections of this form are carry-overs from the Request Form. These two areas should be explored further before diving into the actual work. The first appearance of cost requested a general estimate. Now, the cost should be broken down further. If the project is very intense, this is where a cost/benefit analysis can be performed. For simpler projects, this is where budget and personnel details should be listed if they are known. Simply because the project does not require a budget does not mean that the costs should be ignored. Library staff time is a major budget constraint, especially in workplaces with increasingly higher workloads. These considerations should be explored in this section of the form.

Additional consideration should also be given to selecting members of the team and their responsibilities at this time. The Request Form may have included team member suggestions presented by the individual with the initial idea. In the planning phase, the project manager should take these suggestions into consideration and consult with others to select members for the team. The *HBR Guide to Project* insists there are four critical criteria for selection as project team members. The team should include members who have technical skills, problem-solving skills, interpersonal skills, and organizational skills (34). After selecting and indicating team members based on their skills, their roles and responsibilities within the project should also be defined. It is important to have the team members sign off on the agreement form. They will be able to see and approve the scope of the project as well as their level of involvement.

It is during the planning phase that the project manager must consider how to conduct effective meetings. Many library staff members are inundated with meetings, so the project management process should take this into consideration. Use meetings sparingly. The *HBR Guide to Project Management* recommends several considerations when planning effective meetings such as “make sure the meeting is even necessary...” (113). This simple statement may seem blindingly obvious, but if the issue is able to be resolved over email, do not call a meeting. Establishing an agenda keeps meetings on track, and setting a time limit will keep the meeting moving at a brisk pace.

Overall, the planning phase should lay out the extent of the project, including objectives, goals, priorities, costs and team members. With a complete view of the workload, the manager will be better able to break the project into sub-projects and commence work.

PROJECT AGREEMENT FORM	
<p>General Information:</p> <p>Project name: _____</p> <p>Project Manager: _____ Start Date: _____</p> <p>Description: Describe the overall objectives of the project.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Goals: State what goals the project should accomplish.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Priorities: List and prioritize sub-projects.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Costs: Offer estimates of the cost (both financial and personnel) of the project.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Team: List the team members and their roles and responsibilities.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Signatures:</p> <p>_____</p> <p>Project Management Coordinator Date</p> <p>_____</p> <p>Project Manager Date</p> <p>_____</p> <p>Team Member Date</p>

Fig. 2 Sample Project Agreement Form

Execute

Executing the project is what most people envision when picturing project management. While the majority of the visible work is completed in this phase, a good project manager will have taken a very active role up to this point. From here, much of the leadership will be assigned to other team members. While managers should remain active, delegation is important in this phase of the project. The Request and Agreement Forms were each filled out once for the project, but the Sample Project Breakdown Form (fig. 3) deviates from this one time structure. A Breakdown Form should be completed for each sub-project. For example, if the project is to condense print materials to allow for more study space, some of the sub-projects may include weeding the collection, space planning, and shifting materials.

The easiest way to think of the Breakdown Form is to look at it as an extension of the Agreement Form. The five headings here have all been used on the previous forms, so this is simply a method of breaking the project down into more manageable parts. Use the description area to go into detail about this sub-project. Whereas there may have been one goal in the previous form related to the sub-project, the breakdown form allows for explanation of further associated goals. Additionally, the cost and time frame should be

specific to this sub-project. The time frame should be presented in whatever format works best for the project. This may be a timeline or a detailed description of time frames. It is important to the planning of the larger project that the sub-project timelines are done. Heldman suggests using a modified version of a PERT analysis. For each sub-project the manager should consider:

1. Optimistic estimate – When everything goes according to plan
2. Pessimistic estimate – When everything goes wrong
3. Realistic estimate – Balance of the two (169-170)

If the manager has looked at the best-possible and worst-possible scenarios, he/she is more likely to make a realistic estimate of the time frame.

The execution phase of project management is when team members most often lose motivation. This is where it is exceedingly important that the project manager or sub-project manager steps in to keep motivation and team morale high. The *HBR Guide to Project Management* advocates for letting all members of the team contribute (114). The few outspoken members of a team often dominate the group. It is the project manager's responsibility to re-focus all members of the team. Managers can do this by posing targeted questions and soliciting short responses. It is also essential to keep an action plan in which the timeline is obvious. If the team is able to see the next steps, they are more likely to move forward than to stagnate.

Overall, the execution stage of project management will involve multiple groups of people covering a variety of sub-projects. It is vital for project managers to communicate with the teams and stay informed. Using a Project Breakdown Form, such as in fig. 3, will keep everyone apprised of the project implementation.

PROJECT BREAKDOWN FORM	
General Information:	
Project Name: _____	
Sub-Project Name: _____	
Sub-Project Manager: _____	
Description: Describe the objective of the sub-project.	

Goals: State what goals the sub-project should accomplish.	

Costs: Indicate the costs of the sub-project.	

Time Frame: Lay out a schedule.	

Team: Detail who will be involved in the sub-project.	

Signatures:	
_____	_____
Project Manager	Date
_____	_____
Sub-Project Manager	Date
_____	_____
Team Member	Date
_____	_____
Team Member	Date
_____	_____
Team Member	Date

Fig. 3 Sample Project Breakdown Form

Conclude

Concluding a project is the final step in the project management cycle. For the process to have been considered a project, one of the initial questions asked was: Is there a way to determine if (the project) has been completed? If the project was to upload an archival collection onto the library's website, the logical conclusion would be that it is completed when the site is live. When it is clear that the project has been completed, the manager will move on to evaluation. Managers should solicit input from team members concerning: whether or not the project goals were met, if the project stayed on budget, and how satisfied the team was with the quality of the project. Fig. 4 shows a Sample Project Evaluation Form. It is important to have a number of people sign off on the final evaluation. The sample form asks for signatures from the Library Director, Project Management Coordinator, Project Manager, and Team Members. Depending on the library or project, some may want to include Sub-project Managers or other stakeholders. This form also ties up loose ends and the signatures indicate that the project has been completed. When completed, the evaluation is the last step in project management.

PROJECT EVALUATION FORM	
General Information:	
Project name: _____	
Project Manager: _____ Completion Date: _____	
Description: Describe the final product/service produced by the project.	

Goals: List the goals that were met as well as those that were not met.	

Costs: Indicate if the project went over/under budget. Include sub-projects that were off budget.	

Satisfaction: State the quality of the project and the satisfaction with the outcome.	

Comments: Include additional relevant information about the project as well as suggestions for follow-up.	

Signatures:	
_____	_____
Library Director	Date

Project Management Coordinator	Date

Project Manager	Date

Team Member	Date

Team Member	Date

Team Member	Date

Fig. 4 Sample Project Evaluation Form

Closing

The idea of managing large library projects can be overwhelming. The key, however, is to break down the steps of the project and to further divide out the sub-projects. Once the project has been tacked into small clumps it is much more manageable. Selecting sub-project leaders and team members and using their time wisely will greatly help with the overall momentum of the project. The forms provided within the paper and available online at <http://bit.ly/TLT0HX> will help guide the process, but it is important for each library to customize the process for itself. It is also imperative to realize that things will not always happen in the time frame or way that they were planned. The process of project management is designed so that managers can revise their initial forms and ideas. The most important element of project management is to keep the goals of the library in mind and to continue to move forward.

Works Cited

HBR Guide to Project Management. Boston: Harvard Business Review Press, 2012. Print.

Heagney, Joseph. *Fundamentals of Project Management*. New York: American Management Association, 2012. Print.

Heldman, Kim. *Project Management Jumpstart*. San Francisco: SYBEX, 2005. Print.

Innovation in using Technology for Library Services

Chris Vaughn
Technical Assistant
William Jewell College
Liberty, MO

Abstract

In 2013 William Jewell College opened the Pryor Learning Commons (PLC) with the intention to rethink the way the College offers library services to the campus. The PLC was built to be the library of the 21st century and offers students the opportunity to learn while innovating and creating. The College has both acknowledged and embraced this educational evolution that goes beyond the acquisition of content and moves students from dependence in their educational experience toward independence as mature learners. In addition to a robust library collection, William Jewell offers its students two innovation studios with 80" touchscreens, configurable white board tables, flat screens with wireless collaboration, video conferencing and recording. The PLC has 5 creativity studios for Audio, Visual, Rendering (2D and 3D printing), and Video Production and Editing. William Jewell provides cutting edge technology such as iMacs, midi controller, 3D printer, large-format scanner and digital editing equipment, wireless collaboration with AirMedia, writable surfaces on tables and walls, live Twitter board, touchscreen kiosks, coffee shop, group and private study space with moveable furniture, LEED silver design principles. For more information please visit, <http://www.jewell.edu/pryorlearningcommons>.

From Old Laptops to DIY Digital Displays

Ayyoub Ajmi
Digital Communications & Learning Initiatives Librarian
UMKC School of Law
Kansas City, MO

Abstract

The Northeast Campus Library of Tarrant County College District (Texas) used a Title III Grant to support an innovative project consisting of repurposing old laptops as digital exhibition platforms available to students, faculty and staff. A small number of the frames are used for library promotion displaying FAQs, new acquisitions, and events. The rest of the digital frames are used for exhibition purposes. The project's mission is to promote student success by increasing library attendance and the use of library services by building dynamic and long-term partnerships with other departments, and by providing exposure and recognition to students, faculty and staff members.

Perpetual Motion: Running a 24/7 Library in a 9 to 5 World

Rob Withers
Head of Access Services
Miami University

Abstract

The 24/7 availability of information has led to the demand for 24/7 library services. Miami University increased operations of its central facility, King Library, incrementally, until it began 24/7 operations in 2000. Demand for 24/7 access among students remained so strong that the University reinstated 24/7 hours after an attempt to scale back hours during the recent recession. Issues have included identifying essential services, staffing / scheduling, maintaining two-way communication between overnight and weekday staff, obtaining IT Support, responding to security and safety issues, and relations with other entities at the University. Despite these challenges, the availability of overnight hours continues to be valued and used by our student body.

Introduction

Once upon a time, when many cities were limited to a small number of broadcast television stations, it was customary for many stations to sign off the air during the overnight hours. However, as Jarice Hanson notes in her book *24/7: How Cellphones and the Internet Change the Way We Live, Work and Play*, changes in technology have led to changes in ways that people, especially younger people, manage their time (Hanson, x-xi). Indeed, the availability of information on the internet on a 24/7 basis has changed perceptions, particularly in populations served by colleges and universities, about the hours during which services and information resources should be available to them. As one academic noted in an opinion piece, universities and colleges are rapidly evolving into a 24/7 working environment, with a wide array of services expected around the clock (24/7 Demand Leaves Staff Besieged).

Libraries in particular have been impacted by the interest in around the clock service. One article noted that “If your library has yet to be lobbied by students for a 24-h [sic] space . . . , chances are good that someday soon it will be” (Albanese, 44). A study of ARL institutions in 2008 found that nearly half of libraries were offering consistent 24 hour access (Driscoll & Mott). This trend appears to have been un-diminished by the 2008 recession, as an informal survey of ARL directors in 2011 indicated that over 70% of libraries were doing so (Laaker, 18). Because libraries are sources of access to information and to assistance in locating information, many institutions have experienced pressure for extended hours, up to and including 24/7 access to services.

History of Extended Hours at Miami University

Prior to 2000, Miami University had offered slightly extended hours in the period leading up to final exams. In 2000, the University made its first effort and expanding hours during the full academic semester, with its central facility, King Library, remaining open until 4:00 a.m. Sunday – Thursday and re-opening at 7:00 a.m. the following morning. Full 24/7 operations

of the library began in 2007. During the recession, the University encountered financial setbacks that ultimately resulted in layoffs. At this time, King Library hours were reduced to 24/5, with the Library closing at 10:00 p.m. on Friday nights and 9:00 p.m. on Saturdays. There was an intense backlash from students to this change in hours and the Associated Student Government called on the University to restore 24 hour operations on weekends as well as weekdays. As a result, 24/7 operations resumed in spring 2010 (Finchesser; Grant). With the opening of a new student center in 2013, speculation that 24/7 operations of King Library would be curtailed reached the Associated Student Government, and the Libraries re-affirmed their commitment to 24/7 operations as long as demand is sufficient (Clyburn).

Choices for Service Models

There are a variety of models for late night operations of libraries. Options for consideration include:

- Whether to allow access to an entire building, or to restrict access to one wing.
- Whether to provide full circulation service, or to rely on self-service machines to check out books or laptops.
- Which non-circulation services to provide (Reference? Lab support? Circulation? Security?)

Each institution that contemplates extended operations will need to discuss these options and identify the ones which work best for their situation.

Choosing a Physical Footprint

King Library lacks the ability to restrict access to other floors on the elevator. In addition, the entire building (except for Special Collections) shares a single security system, meaning that security could not be activated only in a “closed” portion of the building. In addition, ensuring that library users have left a portion of the building scheduled to close during a portion of the overnight hours could be a time-intensive and staff-intensive process. Because of the cost of changing the building security system and elevator and the difficulty of being able to secure closed space, the entire building (excluding staff areas and Special Collections) remains open during the overnight hours.

In 2013, the Libraries examined the option of transferring 24/7 operations to the Business, Engineering, Science, and Technology (BEST) Library. In addition to having a smaller physical footprint, this facility also has the ability to close off access to one of its three floors. However, the administration determined that many services available at King were not currently available at BEST. Among these were:

- Textbooks on Reserve, which makes the textbooks from the 50 most heavily enrolled courses available to students. Textbooks for all disciplines were available at King Library due to the 24/7 schedule, and circulated heavily.
- An ATM machine, which students relied on to place money on their cards for printing and copying.

- Multiple value transfer stations, which allow students to add money to their cards. These machines break down frequently, but the availability of redundant machines in King Library usually means that at least one machine is working at all times.

This presented the administration with the options of (a) ceasing to offer these services, (b) moving these services to the BEST Library, or (c) offering duplicate versions of these services at the BEST Library.

Choosing a Method of Access

Many libraries use identification card swiping equipment to limit access to facilities during late night hours (Bowman, 221). This setup has been problematic at Miami. In theory, faculty, staff, and students can gain access to the building between 11:00 p.m. and 7:00 a.m. by swiping their University identification cards. However, access is possible only with an identification card issued by the University a few years ago. There is a widespread misunderstanding on the main campus that the University will charge for upgrading from the older card to the newer one. As a result, a significant part of the University population still relies on an older identification which will not allow them access to the building. Circulation staff must verify that those unable to enter the building are affiliated with the University and allow them access to the building (and also keep students from propping open the doors or admitting unaffiliated persons).

Choosing Available Services

Studies indicate that the primary demand during overnight hours is for study space (Engel et al., 96; Scarletto et al., 372) and the most consistently offered service during extended hours is circulation services (Driscoll & Mott; Steele & Walters, 10). In King Library, circulation provides services which support study, most notably the checkout for digital equipment, study room keys, and textbooks for the 50 most heavily enrolled courses (which accounts for over two thirds of circulation transactions). In addition, circulation supervisors are responsible for building operations, and are the designated contacts for Physical Facilities and University Police. Some institutions rely on a combination of swipe-card access and security personnel as an alternative model of staffing (Rea, 48; Lawrence & Weber, 530).

Current Operating Model / Current Usage

King Library ends most non-circulation services between 10:00 p.m. and 2:00 a.m., with the Center for Information Management Lab being the last service point to close. The Circulation Desk remains fully staffed during all hours. The primary factor in providing full circulation service was the expectation of service held by the student body. Students have come to expect troubleshooting with digital equipment, networking, printing, and copying, and the overnight hours have not diminished this expectation. In addition, circulation staff can page videos from our IMC's closed stack collection during overnight hours.

Access Services has three overnight positions (two 9-month, one 12 month). On any given night, two of the overnight positions are on duty, providing redundancy in the event of sudden illness, vacation, or one of the positions becoming vacant. Redundant scheduling

helps to avoid scheduling problems experienced by some institutions which rely on a single position in the evening (Bowman, 225; Sewell, 23). At most hours, a student employee is scheduled as well. Occasionally, we have adjusted staff schedules due to vacation or illness. The only significant disruption to overnight operations occurred when one staff line was vacant, and the person occupying the other position was unable to report to work due to a level three snow emergency in his county. In that instance, the library closed until personnel could report in the morning. We have been fortunate to have a currently enrolled MLS student in one of these positions, which helps out when students have questions about research during the overnight hours.

For Fall Semester of 2013, the average number of circulation and informational transactions ranged from a low of 11.24 per hour (5:00 a.m. – 6:00 a.m.) to a high of 47.48 per hour (midnight to 1:00 a.m.) While significantly less than daytime numbers, which can average 300 transactions per hour during the early afternoon, they constitute a steady stream of traffic. Since studies report that students value the availability of the library for study space during overnight hours, perhaps a better measure of overnight activity is the number of logins per hour, which ranges from a low of 86.88 per hour (5:00 a.m. – 6:00 a.m.) to a high of 314.56 per hour (midnight to 1:00 a.m.).

Challenges

Regardless of what model libraries choose for extended/overnight hours, there are several challenges likely to arise. Many of these come about because most campus services focus on first and possibly second shifts on weekdays, when classes are in session. When one service provider called the former Dean of the Libraries on a Friday afternoon and assured her that they would respond to a difficulty on Monday morning, she noted that if you think of an eight hour block as one shift, then the period from Friday evening through Sunday morning is the equivalent of one week of shifts. In her words, “Monday is a long way away when you are open 24/7.”

Challenge: Building Maintenance

One of the most significant challenges the Miami University Libraries experienced was building maintenance. As a result of re-structuring by our Physical Facilities Department, housekeepers were moved to an early morning shift which ended at 1:30 p.m. unfortunately, the building is at its busiest during the afternoon and evenings. Following the change in staffing schedules by Physical Facilities, trash cans would routinely be overflowing by the time evening custodians could come in to empty them, and would overflow again before the morning shift. Weekends were a particular problem. The Libraries ultimately took pictures of these difficulties and printed them on a poster, which was presented to Physical Facilities. The result was improved staffing, particularly on weekends.

Challenge: Building Safety

The author’s predecessor as Head of Access Services noted concerns when King Library first extended its hours:

In retrospect, we who work at the main library's circulation desk blush (just a little) at our initial reaction [to extended hours]. Our first response was indeed reactionary: great apprehension for the safety of employees, visions of skulkers in the stacks preying upon unwary patrons, pizza and beer parties raging among the Government Documents microfiche cabinets. Our sense, overall, was one of impending doom (DiMarco & Van Dam (1998, 7-8).

These concerns were, as DiMarco and Van Dam note, exaggerated. A review of incident reports filed for maintenance issues and emergencies for the 2013/2014 academic year indicates that there were a total of 21 incidents of some kind. Seven incidents were reported between the hours of midnight and 7:00 a.m. Three involved intoxicated individuals who received medical evaluations from EMT's, one involved use of drugs (a pipe and the lingering odor of marijuana were found after the fact), one involved a non-drug/alcohol-related medical emergency, one involved a report of panhandling, and one involved a serious leak. During the same period, there were four reported incidents from 5:00 p.m. until midnight (1 serious plumbing issue, 1 theft of laptop, 1 instance of multiple alarms from a fire exit, and 1 report of conduct prohibited by the Miami University Policy and Information Manual) and nine incidents from 7:00 a.m. – 5:00 p.m. (1 electrical malfunction, 2 medical emergencies resulting in emergency transport, 4 serious leaks, 1 serious plumbing issue, 1 fire reported in a trash can on the front porch of the library, and 1 report of conduct prohibited by the Miami University Policy and Information Manual).

The presence of University Police aids in creating an environment in which students feel safe. When University Police headquarters moved into a new headquarters located on the opposite side of campus from the library, they sought to create a presence on the side of the campus which houses King Library (and is adjacent to Oxford's uptown). The Libraries stepped in to provide them with a substation in the library. In addition to enabling police to respond to incidents taking place in or near the library, it also ensures ongoing police presence in the library.

Since the Library sits along the main path to Oxford's busy uptown, and close to street parking, the area around the library tends to be well traveled even during overnight hours. A ride sharing service is also available.

Security cameras operate at multiple locations around the building, and can be used to identify individuals suspected of misbehavior.

Challenge: IT Support

Miami's IT Services contracts provision of overnight support via their help line. With the exception of one incident where wireless service was inconsistently available over one weekend, support has been generally effective.

IT Services also handles the campus-wide contract for printers and copiers. When they selected a new vendor, the Libraries learned that the previous vendor, who frequently serviced machines at night and on weekends, was not obligated to do so by contract. IT Services had been unaware that the Libraries had been receiving night and weekend service

when they negotiated the new contract and therefore did not include this service. When the new provider learned of some of the challenges that arose during overnight and weekend hours, they offered to provide service during peak usage times, such as midterms and finals.

Challenge: Communication with Employees

Another challenge is communication with staff and students who are spread out over a 24/7 schedule during the academic year. No two people in the Access Services department have the same schedules. Of the ten staff members in the Department, only five have a Monday – Friday schedule and only one works an 8:00 a.m. – 5:00 p.m. schedule.

Mandatory meetings to review policies and provide updates to student employees are scheduled immediately after the library closes for Labor Day Weekend. Communication with staff is more challenging. Since two positions are nine-month contracts, the only time available to train all staff is during the winter break and January term when the library is open for reduced hours. After receiving a day or two of introductory training, new staff are moved to their permanent schedule, and are trained by either of the Access Services department's two unclassified positions (the department head and the circulation manager). Performance reviews are sometimes conducted in the same way, with one of the unclassified positions arriving at the end of the overnight hours (between 5:00 and 8:00 a.m.) to conduct performance reviews.

Conclusion

Operating the library during extended hours entails contending with logistical and budgeting challenges. However, the availability of the library and some of its core services is genuinely appreciated by the students. As noted above, Miami's Associated Student Government has expressed its support for these operations, and Miami's administration has responded.

In response to a survey about Miami's newly-established January term in 2014, students were asked to rank which services were most important to them, and ranked the libraries as the second most important feature. In follow-up surveys after the first January term, one of the most requested changes was library hours. Given the number of people who were present in the building at closing time, these hours have been extended, although not to full 24/7. Nevertheless, the interest in having a library facility open, and available well into the evening, continues to be strongly supported by Miami's student body. The Libraries are pleased to be able to meet this need.

Works Cited

"24/7 Demand Leaves Staff Besieged." *Times Higher Education* 23 Mar. 2007. Web. 5 June 2014.

Albanese, Andrew Richard. "The Best Thing the Library Can Be is Open." *Library Journal* 130.15 (2005): 42-45. Print.

Bowman, Adam C. "24-Hour Academic Libraries: Adjusting to Change." *Journal of Access Services* 10.4 (2013): 217-239. Print.

- Clyburn, Kathleen. "Rumor Has It: ASG Quells King Library Speculation." *Miami Student* 28 Feb. 2014. Web. 15 May 2014.
- DiMarco, Scott, and Scott Van Dam. "Late Night in an Academic Library: Issues, Concerns, Planning." *Library and Archival Security* 14.2 (1998): 7-23. Print.
- Driscoll, Lori, and Angela Mott. *After Midnight: Late Night Library Services*. Washington: Association of Research Libraries, 2008. Print. ACRL Occasional Paper. 23.
- Engel, Debra, et al. "Opening a Library 24 Hours." *Journal of Library Administration* 36.4 (2002): 95-108. Print.
- Finchesser, Erin, and Andrew Grant. "Library Schedule Returns to 24 Hours." *Miami Student* 14 Feb. 2011, Web. 29 June 2013.
- Hanson, Jarice. *24/7: How Cellphones and the Internet Change the Way We Live, Work and Play*. Westport: Praeger, 2007. Print.
- Laaker, Sarah. "Keeping the Doors Open: Exploring 24 Hour Library Services at Washington University St. Louis." *Research Library Issues: A Quarterly Report from ARL, CNL and SPARK* 277 (2011): 15-25. Print.
- Lawrence, Peg, and Lynn Weber, L. "Midnight – 2:00 a.m.: What Goes on at the Library?" *New Library World* 113.11/12 (2012): 528-546. Print.
- Rea, Gavin. "Open 24 Hours at the University of Bath Library and Learning Centre," *Assignment* 20.4 (2003): 47-9. Print.
- Scarletto, Edith A., et al. "Wide Awake at 4 AM: A Study of Late Night User Behavior, Perceptions, and Performance at an Academic Library." *The Journal of Academic Librarianship* 39 (2013): 371-377. Print.
- Sewell, Bethany B. "24-Hour Access: Responding to Students' Need for Late Library Hours at the University of Denver." *Journal of Access Services* 10.1 (2014): 14-17. Print.
- Steele, Patricia Ann, and Carolyn Walters. *Extended Library Hours*. Washington: Association of Research Libraries, Office of Leadership and Management Services, 2001. Print.

Moving to a Team Based Library Service Model

Judy Wanner
Associate Librarian
University of Guelph
Guelph, Ontario, Canada

Abstract

The University of Guelph Library moved from a Liaison based service model to a Team based model in 2010 to provide improved service in a more efficient and collaborative way. Our goal was to better leverage professional and support staff expertise while responding to budget constraints and a reduced staff compliment. All library service is now provided by 5 teams: Research Enterprise & Scholarly Communication, Learning and Curriculum Support, Information Resources, Discovery & Access and Archival & Special Collections.

This presentation contrasts the library's Liaison and Team based models, describes the rational for our change and how the library has changed as a result, and reviews the success and challenges of the Team Service Model four years after implementation.

The University of Guelph is a comprehensive public research university in Ontario, Canada with 23,000 students and academic staff. Library service is provided from one central building by 16 professional librarians with additional technical staff.

Tweeting and Pinning: Collaborative Research Using Social Media

Plamen Miltenoff
Professor InforMedia Services
St. Cloud State University
St. Cloud, MN

Gary Schnellert
Associate Professor
University of North Dakota
Grand Forks, ND

Abstract

While social media has become ubiquitous among all generations, few people consider using social media for research. How does one acquire pertinent information in a timely manner? How does one evaluate the acquired information? How did information acquisition and evaluation change with the transition from Web 1.0 to Web 2.0 and with the proliferation of social media? How does academia respond to the students' involvement with social media? What is the role of academic librarians and teaching faculty in the process of incorporating social media in the teaching and learning process? Please join the discussion with your ideas, answers and questions regarding the use of social media in education.

Using Graphical Depictions of Statistics to Evaluate Collections in an Academic Library

Heather M. Rayl
Emerging Technologies Librarian
Indiana State University

Ryan Weir
User Services and Library Technologies Librarian
Rose-Hulman Institute of Technology

Abstract

The Indiana State University Library uses statistics to make decisions concerning collections and collections budgeting. Over the last few years, the library has been building its ability to gather, maintain, interpret, and disseminate statistical information concerning collection usage and cost. This paper includes a discussion of how home grown data gathering techniques and a Serials Solutions Counter 360 implementation are used to create an online visual dashboard to effectively and efficiently disseminate the data to stakeholders. The paper will further explore what the authors have discovered about resource use in the library. Finally, the authors will discuss future plans of maintaining and growing the data set.

Introduction

Indiana State University Library, located in west-central Indiana, is a mid-sized public university. With 12,448 students: 10,268 undergraduates and 2,180 graduates (Indiana State University Institutional Research), the Cunningham Memorial Library provides resources for a wide variety of majors spanning liberal arts, nursing and other medical fields, education, business, computer engineering, and construction technology. To support these programs' students and faculty, the library spent approximately \$904,000 for electronic resources in fiscal year 2013. As the cost of electronic subscriptions continues to grow every year, the authors have found that library budgets grow less quickly, or remain stagnant. In order to continue to support student and faculty information needs, libraries must optimize the funds available and purchase resources that are most needed to support the university. No funds are available to expend on resources that are little used, or used by only a few. The authors saw a need to address usage directly and devised a program that collected data from disparate resources into a single location for analysis.

Techniques Used

The Cunningham Memorial Library is currently implementing Serials Solutions Counter 360 to track its electronic resource statistics. Counter 360 is a usage statistics module that provides a backend interface that allows a library to enter their SUSHI and COUNTER login information for resources. Counter 360 then automatically harvests the usage data from the specified resources. In certain cases, the Serials Solutions team will also use the login data to access the usage statistics manually and upload them into the system via an excel file. Library staff can also upload data in this manner.

While products like Serials Solutions Counter 360 are a tool to harvest and store the raw statistical data, the authors discovered a need for a central place to track all use across the board. While Counter 360 is SUSHI compliant, the authors have been unable to properly configure COUNTER collections for participating vendors as of this writing. Working closely with a library support staff member, the authors created a spreadsheet in Microsoft Excel to record use for each product purchased for the institution. The authors chose to collect COUNTER statistics whenever possible, and on a monthly basis. For products that did not offer COUNTER statistics, the authors determined what could be counted as use. For instance, for products that were mostly a database that offered abstracts, sessions were counted as a use. Products that contained full text or other article-type content, downloads or full text views were counted as use. Each time a decision was made regarding the kind of data being collected, it was recorded in the spreadsheet to ensure the same data was collected each month.

At the end of the fiscal year, the data was then compiled into an intranet site in the form of charts and graphs. While Excel can create charts, the charts do not handle complex data well (see fig.1).

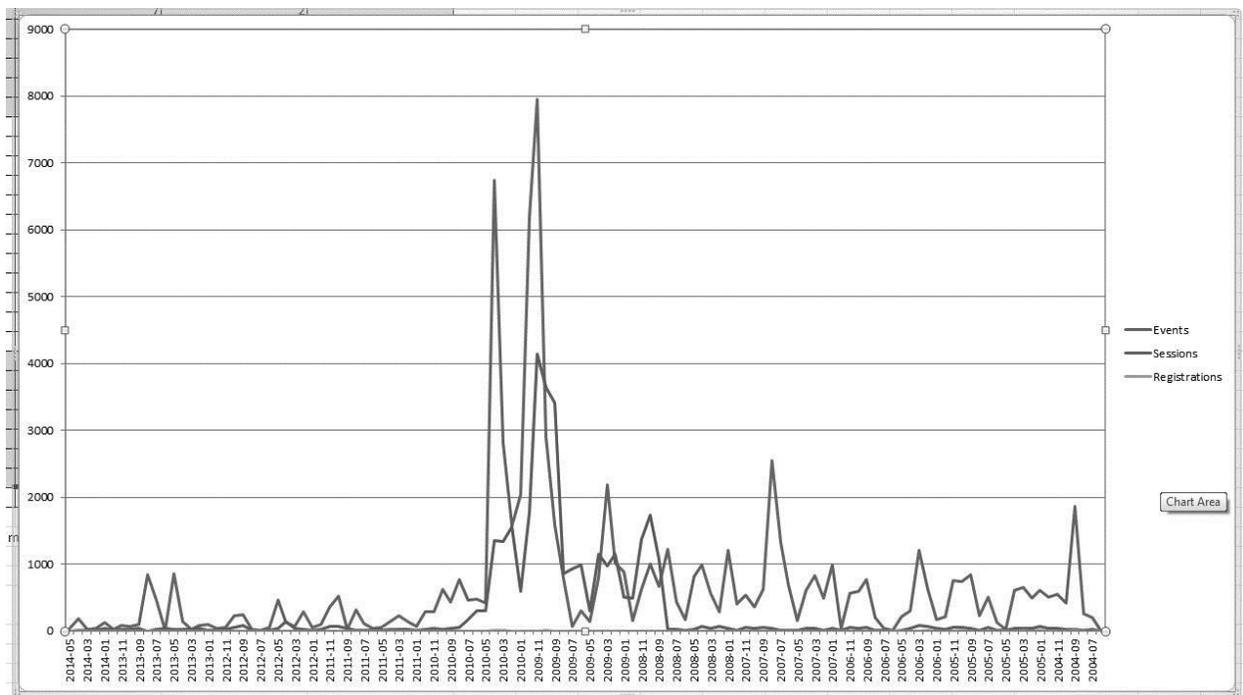


Fig. 1. Example of a chart produced in an MS Excel Spreadsheet.

The library recently used a jQuery charting product, HighCharts (<http://www.highcharts.com/products/highcharts>), to generate an interactive and dynamic dashboard of annual statistics. These charts are highly configurable using a well-documented API, and allow the end user to manipulate the chart. For instance, fig. 2 shows the initial chart created with HighCharts using the same data as the Excel chart shown in fig. 1. While on initial examination, the two charts appear similar, the HighCharts chart allows the user to

interact with the chart to obtain more information. Hovering over a data point with the mouse makes a tooltip appear with more information (see fig. 3). The chart also allows you to click and zoom on an area to get a more detailed view (see fig. 4). You can also “turn off” certain streams of data, and the chart will automatically adjust the axis (see fig. 5). The user can even download the chart into different formats including jpg, png and pdf, as well as an svg vector graphic, thus making the images easily reproducible for annual reports, posters, and other documents.

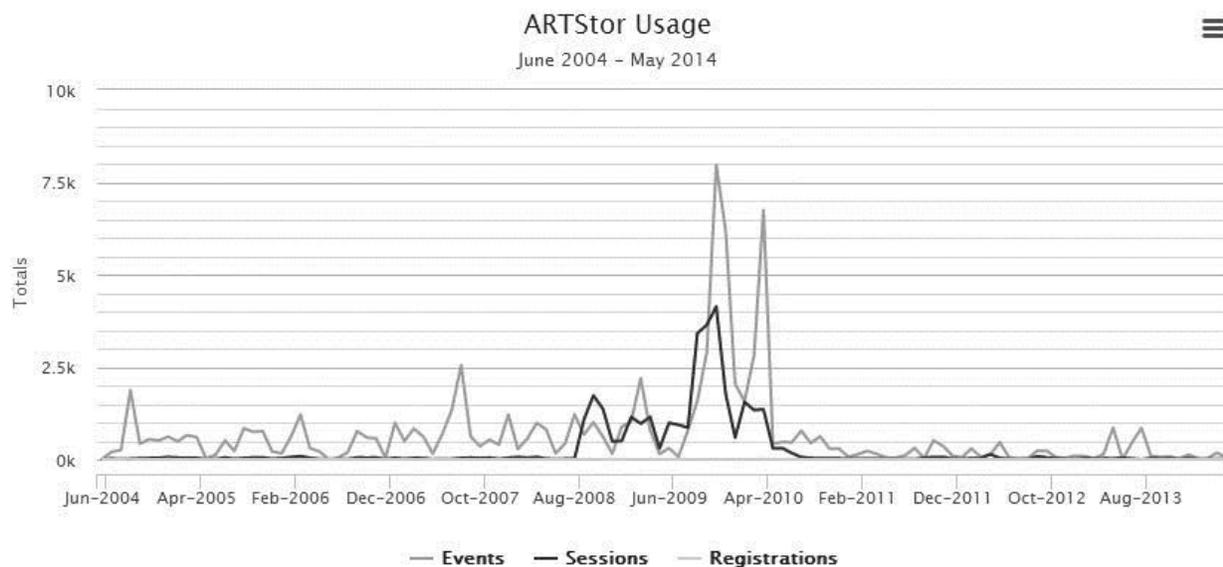


Fig. 2. Example of chart as rendered in Highcharts.

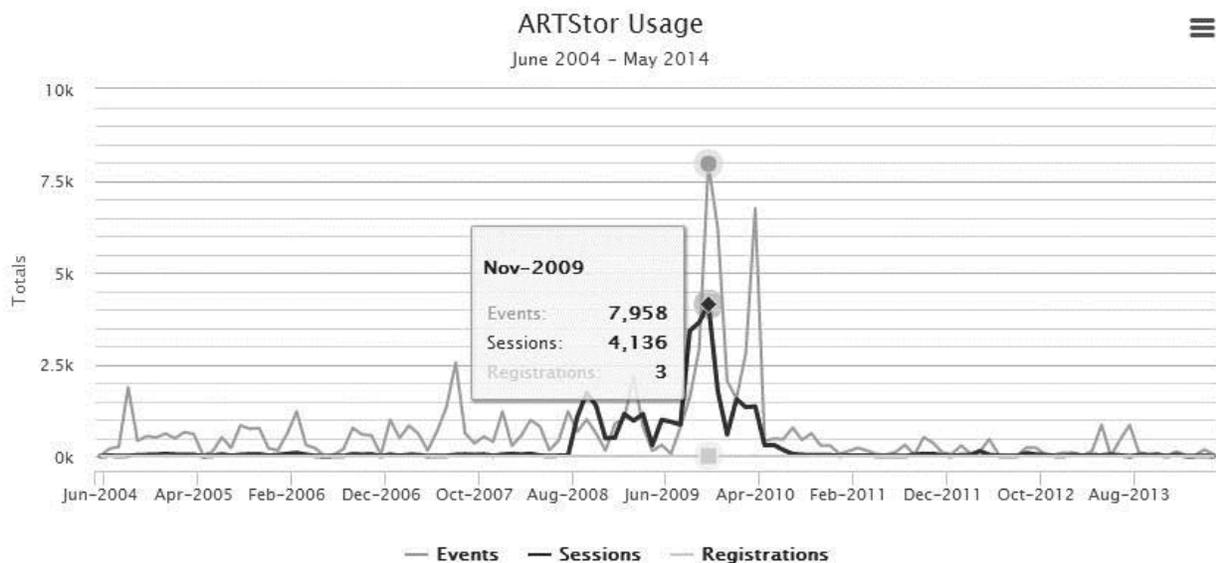


Fig. 3. When the user hovers over a particular data point, more information about that point appears in a tooltip.

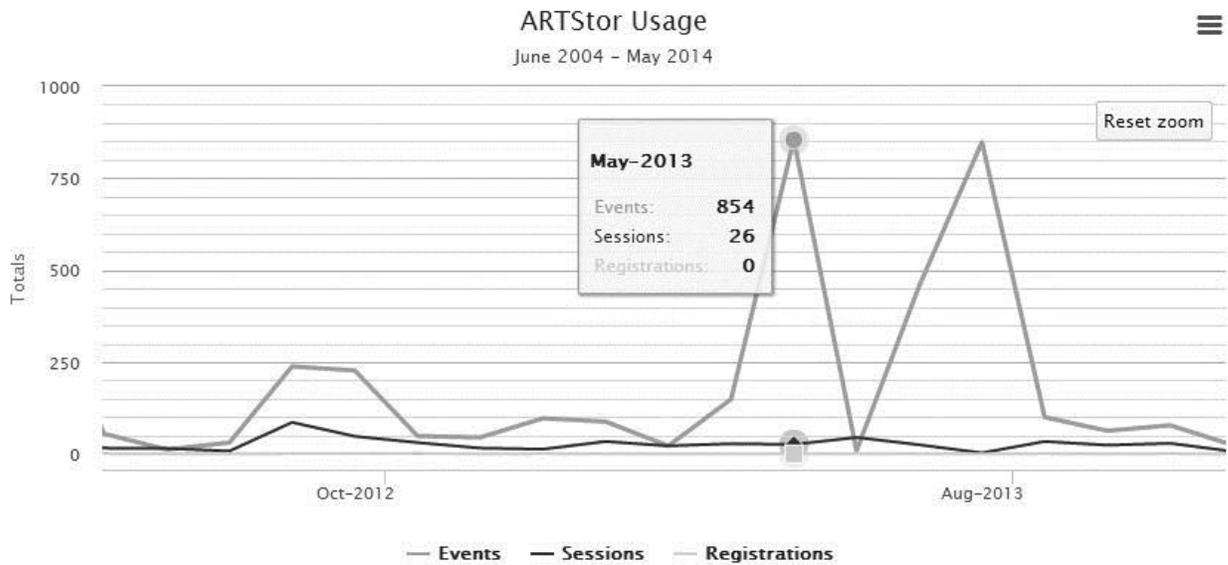


Fig. 4. The user can click and drag to zoom on a particular portion of the graph.

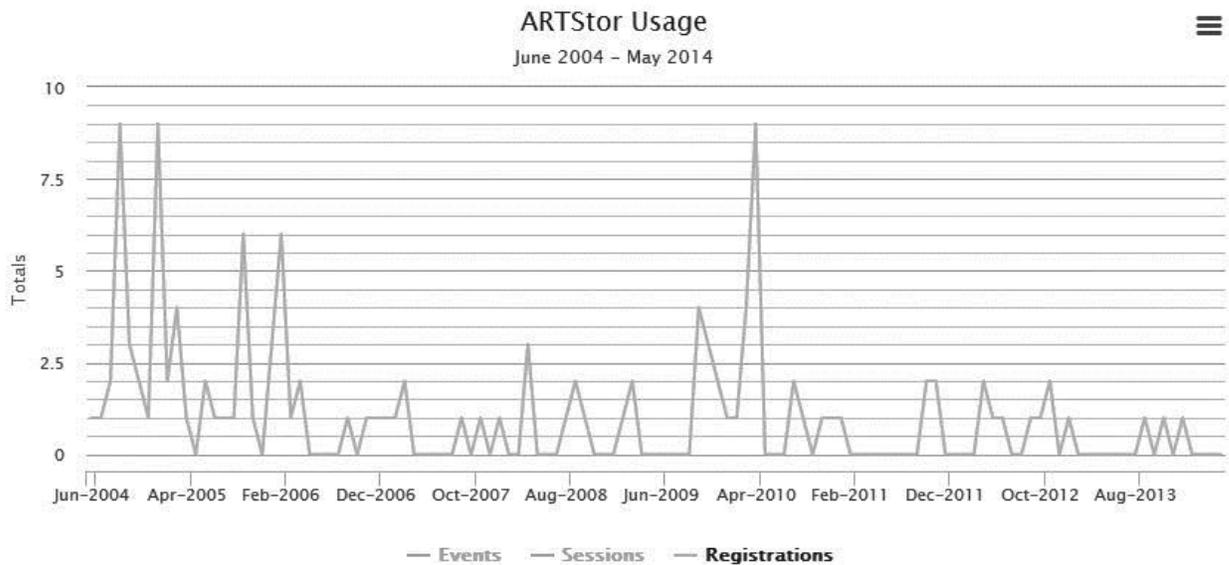


Fig. 5. When the Events and Sessions series are turned off, the user can see more clearly the progression of Registrations when the y-axis automatically adjusts to the scale.

Charts for each resource were embedded on an internal intranet page. In some instances, a data table was also provided for large sets of data, or for data that could not be easily represented in a graphical form. The data tables were also interactive, using a simple php script to sort the columns when the user clicked on a table header.

The intranet page was made available to the Library's administration and the Library's Collection Development Committee for analysis.

Why is Visualization Needed?

In *Beautiful Evidence*, Edward Tufte states, “The purpose of an evidence presentation is to assist thinking. Thus presentations should be constructed so as to assist with the fundamental intellectual tasks in reasoning about evidence: describing the data, making multivariate comparisons, understanding causality, integrating a diversity of evidence, and documenting the analysis” (p. 137). And indeed, visualizing sets of data can sometimes significantly aid in the analysis of a question.

Tufte gives two such examples in his book *Visual Explanations*. In 1854, the Broad Street area of central London suffered from a severe cholera outbreak. The spread and cause of the disease was not understood in this time period, in fact many physicians believed that cholera was caused by miasmas, or poisonous gases rising from the ground. However, John Snow, the founder of modern epidemiology, had studied several outbreaks of cholera in England and suspected that the disease was being spread by contaminated water. Snow was able to test his theory on a grand scale in the Broad Street outbreak by conducting extensive door-to-door interviews with the victims’ families and neighbors. After mapping the deaths and their water source, Snow was able to trace the outbreak to the Broad Street pump, and requested that the handle be removed. While this may not have actually been the definitive factor of ending the outbreak (for instance, many people had fled the area and the possible pool of victims had shrunk significantly), it doubtless prevented a second outbreak from occurring.

Tufte also describes a famous disaster that might have been prevented if better visual representation of the data had been presented to decision makers. On January 28, 1986, the Challenger shuttle exploded killing all seven astronauts on board. Seventy-three seconds after rocket ignition, two rubber O-rings did not seal properly because they were too cold, causing fuel leakage. The day before the launch, engineers at Thiokol, who had designed the shuttle, were concerned that the predicted temperature would be too cold for the O-rings to seal properly. They faxed a presentation to the control team at NASA containing 13 charts, along with their recommendation not to launch. After all night debates with NASA over the relevance of the charts and the data described within, Thiokol’s engineers changed their minds and recommended launch. While this case has been reviewed and dissected across many different disciplines (engineering, business management, sociology to name a few), Tufte concludes, “Regardless of the indirect cultural causes of the accident, there was a clear proximate cause: an inability to assess the link between cool temperature and O-ring damage on earlier flights” (p. 40).

Tufte’s lengthy and detailed analysis of the design of the charts and graphs the engineers at Thiokol presented to the NASA Control Team outline numerous weaknesses that obscured the connection between cold temperature and O-ring failure. Two charts showing degrees of damage to O-rings in previous launches and experimental data fail to show the temperature data that also correlated with O-ring failure. Other details in the charts, like confusing naming conventions and selection of only certain data sets (leaving out ones that would better illustrate the effect of cold on sealing O-rings), and not comparing failing O-ring tests to successful tests led to the engineers’ case being perceived as inconclusive. He states, “...[It] was as if John Snow had ignored some areas with cholera and *all* the cholera free areas and

their water pumps as well. The flights without damage provide the statistical leverage necessary to understand the effects of temperature” (p. 44).

Libraries, of course, also can use charts to visualize information to assist in analysis. For example, a vendor may say that their product (A) has 3,000 full text journals and their competitor’s product (B) only has 2,000. This information could be used by the vendor to do a cost or value analysis. If product A is \$6,000 and product B is also \$6,000 then the vendor can state that the library is paying \$2.00 per full-text journal for their product and \$3.00 per full-text journal for their competitors.

If a library subscribed to both products, but due to financial constraints decided that one of the products needed to be discontinued, the library would want to conduct a cost per use analysis of both products. If product A had 200 full text views and product B had 2000 full text views, an article on product A would cost the library \$30.00 per full text use while product B would only cost the library \$3.00 per full text use. Even though product B has less full text articles, it is getting far more use, therefore making it the preferable product. When presenting this information in a budget presentation or presentation to academic faculty, giving the information in a visual format is helpful so that attendees can assimilate the maximum amount of information in the time constraints of the presentation.

These examples show how important visualizing data can be when making a decision. While libraries are not making choices that affect life and death, librarians still must choose to spend allocated funds wisely. They must balance institutional needs for research materials with the reality of shrinking budgets and rising costs. Gathering use statistics on electronic resources justifies the amount of money spent on them. Communicating use in a way that is easy to comprehend is also a valuable exercise.

Making Evidence-Based Decisions

Using statistical use data for the purpose of justification of resource additions, continuations, and cancellations has become common practice in libraries across the country. Libraries now function in a paradigm in which there is either flat or shrinking funding for resources within growing demand for access to additional content. Usage statistics and cost-per-use data are an invaluable tool in a library arsenal. Displays of the data gathered are useless if they cannot be used to make decisions for the library.

Librarians at New York University Health Sciences Libraries wrote an article in 2012 detailing the information dashboard they built for services in their library, and they gave examples of how such data could be used. For instance, they mined their EXProxy logs for use information and charted various aspects. Not only does their data indicate use of specific databases but it can also be used to indicate use of the resources from inside affiliated hospitals, thus showcasing the positive role the library plays in clinical settings. (Morton-Owens 45).

Likewise, when Indiana State University’s eResources data was visualized, the authors began to notice certain patterns of use. In many instances, use generally followed a slow curve for

the year, having high points in October, November, March, and April, and low points in December and summer months, reflecting the semester-oriented activity of students.

On the other hand, when glancing through the charts, the authors easily spotted patterns that stood out from the norm. For instance, *Access Science* database had a spike of activity for both full text retrievals and unique sessions in February 2013. However, there was no comparable spike in the number of searches indicating that most likely an instructor had assigned a particular article for a class. *Films on Demand* showed a similar anomalous spike in June 2013, when most likely portions of the site had been assigned for a summer session class. When the access chart was viewed in conjunction with the subjects use chart for *Films on Demand*, the authors concluded that the class was mostly likely in the political science field, with an international focus.

Similarly, when analyzing data Ovid's *Mental Measurements Yearbook*, the authors found that for 2013, the number of searches and sessions were 11 times more for the months of February, March and April 2013 when compared to the other months of the year. A parallel spike in the fall months of typically heavy semester use was not observed. This particular data set was flagged. When reviewed for 2014, the same pattern of use was exhibited - a spike in the spring semester, with relatively flat use for the rest of the year. This kind of pattern most likely indicates that a professor is using the product in a classroom setting, and that the class is only taught in during spring semesters.

In all of these instances, the data points to specific resources being used in classroom settings. Much like it was important for the New York University Health Sciences Libraries to show that their resources were being utilized in clinical settings, the Indiana State University Library needs to demonstrate its impact on student learning. When use data shows that professors are using resources in their classrooms, the Library can demonstrate that not only are the products it provides being used in student and faculty research, but are also serving as an important pedagogical tool.

Conclusion and Next Steps

“People use dashboards to monitor a collection of information related to their work. Their understanding of their work exists as one or more mental models in their brains...[A] dashboard works best when it represents the information that's needed to update someone's mental model in a way that closely matches that mental model” (Few 60). Electronic resource librarians need to assess each product's effectiveness on a longitudinal basis. Renewals occur generally once a year for most products, and comparing monthly and yearly uses of products help librarians make choices about which products to continue. Additionally, libraries must show that their collections are relevant to the populations they serve.

Now that the authors have created the framework for the data collection for Cunningham Memorial Library's resources, new data will be collected for future years. This data can then be compared to previous years' numbers, and even richer and more informed choices can be made about the use of the electronic resources to which the library subscribes.

For ongoing visualization efforts, the authors will need to re-visit each resource's chart design. For the first year of the project, the majority of the charts only displayed a single year of data. In order to track use by year, other styles of charts may be needed to optimize the view and not obscure possible data points. Once each chart has been re-designed, the authors plan to work on a method to further automate the input process so that new data can be added on a monthly basis, rather than yearly. This will allow monitoring of collections throughout the year and further impact effective and well-informed collection management decisions.

Additionally, the authors would like to incorporate cost per use data in the intranet site. Currently, cost data is kept separate from the use data, and only calculated on a case-by-case basis, as it is not always the best metric on which to make decisions. However, displaying cost per use along with total use will provide even more decision making information. Most of all, the authors would like to continue the data collection for cumulative benefits. The more years that are available to compare, the richer the data set, thus enhancing and informing the decision making process.

Works Cited

Few, Stephen. *Information Dashboard Design Displaying Data for at a Glance Monitoring*. Burlingame: Analytics, 2013. Print.

Indiana State University Institutional Research. "Enrollment Summary. Fall Semester 2013. Indiana State University." *indstate.edu*. Indiana State University, 2013. Web. 8 June 2014. <http://irt2.indstate.edu/cms/ir/assets/File/es_f13.pdf>.

Morton-Owens, Emily G., and Karen L. Hanson. "Trends at a Glance: A Management Dashboard of Library Statistics." *Information Technology and Libraries* 31: 3 (9 Oct. 2012): 36–51. Web. 23 Jun. 2014. <<http://ejournals.bc.edu/ojs/index.php/ital/article/view/1919>>.

Tufte, Edward. *Beautiful Evidence*. Cheshire, CT: Graphics Press, 2006. Print.

Tufte, Edward. *Visual Explanations: Images and Quantities, Evidence and Narrative*. Cheshire, CT: Graphics Press, 1997. Print.

Librarians Going Mobile: Applying “Threshold Concepts” to the Design of E-Booklets for Library Instruction.

Lorna Dawes
Assistant Professor, First Year Experience Librarian
University of Nebraska-Lincoln

Abstract

Assuming that students no longer read printed handouts, many librarians have stopped producing printed handouts after observing the piles of paper that remain after library sessions. Libraries have transitioned comfortably to providing online access to handout information via subject and course guides, and now need to make a more complete transition to making them mobile. Although only four in ten college students own a tablet, 75% own a smart phone, and over a third of students intend to purchase either a tablet or a smart phone in the next six months. (“Pearson Student Mobile” 7). Librarians are all aware that tablet and smartphone use in the college classroom is on the increase, and already some courses are instituting mandatory tablet requirements.

In 2011 the author began to publish an information literacy E-Booklet series called “6 Quick Tips.” The e-booklets are used in classroom instruction and are downloadable on iPad, Kindle and Android devices. This paper will discuss how the theory of “threshold concepts” influenced the design and content of the e-booklets, point to Sigil and Calibre as software used to design the e-booklets and model an instructional learning activity in which the students will use the e-booklets in a classroom setting.

Background.

In an effort to increase enrollment and retention the University of Nebraska-Lincoln (UNL) established 21 first year learning communities for students with common majors and career interests. These learning communities consist of first year students with similar academic goals, who live in the same residence halls, enroll in common classes, and participate in community events to support their curriculum. These unique social and scholarly environments offer smaller class sizes, and cultivate distinctive approaches to teaching, learning and research that are exclusive to each learning community. Each community requires that the students be involved in common academic experiences and social events that enhance their learning and relationships with the faculty and also with other students.

In 2012 the University of Nebraska-Lincoln Libraries created a new position, the First Year Experience & Learning Communities Librarian, to serve all first year students and these smaller first year scholarship and learning communities. The librarian’s goal was to provide some unique library experiences for these students to support their academic career and the social events offered by the communities. The William H. Thompson Learning Community is the largest first year learning community on the UNL campus. The community consists of first generation students who have been awarded a Buffet Scholarship of full tuition and board, for all four years of their undergraduate education. They have dedicated faculty who

teach the first year required courses and class sizes are small allowing the students to receive the individual support and attention they need during this critical first year of university.

After working with the classes and having many discussions with the faculty, faculty identified two main areas of concern: the students were relying too much on the Internet and Wikipedia for their research needs and were not selecting suitable information for their papers, and when the students found information they were not able to integrate this information effectively and responsibly into their papers. In response to this, the Learning Communities Librarian designed some first year research workshops and companion e-booklets to address some of these research issues.

The goal of the workshops was to help the students use the Internet, Wikipedia and the library databases as seamless resources for their research needs. The author offered the workshops in the afternoons as a part of the learning community's workshop offerings that were required events for all the affiliated students, and they were designed to be interactive giving students the opportunity to search independently during the workshops for information they need to complete their assignments. This paper will communicate how the Quick Tips e-booklets were designed and used in the research workshops.

Threshold Concepts and Information Literacy

Threshold concepts can be applied to any discipline and according to Meyer and Land they are concepts that have the following five attributes (1). These attributes are transformative (allow students to see content in a new way), integrative (connect concepts and idea between disciplines), irreversible (once learned, cannot be unlearned), bounded (learned within a specific context) and troublesome (they prevent the understanding of a new concept that is contrary to their previous understanding). These concepts are those foundational and vital theories that “are the central concepts that we want our students to understand and put into practice”, concepts that students need to grasp before they can move onto other concepts and principles (Hofer, Brunetti, and Townsend 387). Threshold concepts set the learning outcomes of the lesson and give students “a coherently structured body of ideas and procedures to analyze problems as they are defined by that discipline” (Davis 2). Students then have an opportunity to become valid contributors to the scholarly conversation and begin to think critically about their subject and the information culture within their discipline.

If these threshold concepts are understood, students will gain an understanding that is transformative and permanently changes the way they think towards the course content. For threshold concepts to be of valuable in teaching information literacy, they must be used to inform the design of the information literacy instruction in such a way that it will change how students interact with information, in all areas of their academic and social endeavors.

Information literacy cannot be taught without understanding its relationship with transliteracy. Wilkinson explains the intersection between information literacy and transliteracy, suggesting that information literacy instructors should “downplay the difference between library and non-library resources” and focus how the resources can be used together (32). In this way information literacy instruction becomes more about accessing and using

the information through the variety of platforms and less about knowing how to use specific platforms. Blackmore refers to a “systemic thinking” viewpoint that could bring students into a “holistic comprehension of information sources” (4). If students are taught to evaluate and use information based on its overall value and importance to the task on hand, and not according to whether or not they accessed it through the library website, this moves them into a broader understanding of information that is independent of the library website design and database subscriptions. When we teach students to find information using only the tools and websites that we have access to at that time, this only ensures that we have to repeat the session when our website or database interface change, and does not provide students with the skills they need to be life long learners when they graduate and no longer have access to the library resources.

Threshold concepts are both a product and a process; they are about the learning process in addition to the theory or concept that is learned. They facilitate learning that results in the students taking a journey that changes how they understand the course content. The concepts are cognitive ideas of knowledge that demand “deep learning” without which the student would continue to think in the same way with no shift in understanding taking place (Walker 248).

Using threshold concepts in the design of lessons and instruction tools is more difficult. First the threshold concepts that relate to the content need to be identified. Davis applied threshold concepts in the design of an economics curriculum, by first identifying relevant concepts through an analysis of academic writing in economics, with an analysis of student work from classroom lessons (8). Blackmore in 2010, identified information literacy threshold concepts by using reference desk staff to identify “places where learners get stuck” applying the “troublesome knowledge” attribute. Hofer et al also used this approach to identify information literacy threshold concepts, by isolating and analyzing the troublesome ideas gleaned out of discussions with information literacy instructors (390). The librarian in this project identified the threshold concepts to be addressed in these e-booklets, through discussion with the teaching faculty, student workshop exit slips, and anecdotal classroom observations.

Applying Threshold Concepts to the Writing of the Quick Tips E-Booklets.

The Quick-Tip e-booklets were designed to teach information literacy within a framework of information literacy threshold concepts. The most difficult challenge was to identify the threshold concepts within each information literacy topic. These had to be ideas that the students were having difficulty understanding, and ideas that were fundamental to the topic on hand. These concepts because of their difficult nature would also, if understood, have the potential to permanently transform the information seeking behavior of these students.

Hoffer et al in their research suggests seven potential threshold concepts for information literacy (402). This author identified four of these threshold concepts that had some connection to the problems identified by the teaching faculty, to provide the initial foundational theories for the e-booklets. The e-booklets were not designed to give students detailed instructions on how to use library resources but to give the students a deeper

understanding of the theories and processes behind the searching and finding of information within subject content. The concepts selected were Good Searches Use Database Structure, Format is a Process, Authority is Constructed and Contextual, and Information is a Commodity. These theories reinforced the skills highlighted in the workshops and the strategies covered in the e-booklets.

Good Searches Use Database Structure

This concept “conceive[s] of information sets as something with an organization and underlying system, rather than a mysterious cloud of data that serves up ‘good enough’ information on command” (Hofer et al. 402). When students understand that all information has some degree of organization, they then can grasp how organizing information impacts the access to the data. The fact that the way information is organized can either improve or restrict access to the data, is a concept that is often difficult for students to appreciate. The ease with which they use the Internet makes students unaware of the fact that the Internet is organized and that the search engines do not provide a reliable and efficient way of searching and retrieving all the information in the web that is relevant to their request. The difficulty students have finding information is not because they are accessing a library database, an internet database, a website or a webpage, but is dependent on whether or not they understand how the information within the source is organized regardless of what the sources are. If they understand where to find the details about how the information in the database is organized and if they understand how to navigate the source, then their ability to find more relevant information will increase. Librarians when giving database instruction first need to teach the bigger picture explaining the how and why of database organization, and then they can proceed to show students searching strategies. If students are not given a chance to understand this concept, then database searching becomes rote type learning, with students trying to remember menus and other tricks to achieve the same results as the librarian did in the class.

This threshold concept serves as a foundation in the first and second e-booklets entitled “Searching a Database” and “Narrowing Your Topic- to get an interesting research question”. In the first booklet, students are given strategies for searching databases, and in the second booklet students are given tips on how to identify key concepts and keywords in their discipline, sub-disciplines, and related disciplines. This threshold concept gives them insight into the relationships between disciplines, how this relates to the organization of the information, and influences the search for information within the disciplines. Using database tools to help them narrow their topics then becomes an instinctive approach to narrowing their research questions in all their assignments.

Format as a Process

What differentiates a book from a newspaper, according to Hofer is the process that went into its creation not the way it is accessed (403). This concept is presented in the “Peer Reviewed, Scholarly, Trade or Popular- how to know the difference” and “Finding Reputable Resources on the Web” e-booklets. These e-booklets help students understand the difference between the format, content and purpose of information. Examining the publishing process of information forces students to think more critically about the validity of the information they

find regardless of where they find it. When students understand that information has an inherent value that is retained regardless of how it is retrieved and stored it then becomes easier for them to identify different types of publications and make decisions on their relevance to their assignment. This takes time for them to understand that formats are conceptual and ephemeral but the publishing process that gives information its value and credibility is not. This concept becomes transformative as it changes where students look for information and how they evaluate it. The Internet can then become more than a “banned non-scholarly” information source and can be viewed as a place where important, reputable information can be found (Wilkinson 33). The library database also becomes a resource that warrants a critical approach to information selection.

Authority is Constructed and Contextual

This concept clarifies the relationship between the author and context and becomes the foundation theory in the e-booklets entitled “Peer Reviewed, Scholarly, Trade or Popular” and “Finding Reputable Resources on the Web”. The main theme of these two e-booklets is to help students identify and evaluate suitable materials for their assignments, through their critique of the authority of a particular source that is retrieved from a library database or the Internet. Bias, purpose, and how it influences information choices will force students to think critically about the publications they use and why they make certain selections.

Information as a Commodity

“Thinking about information in economic terms positions students to better understand their responsibilities as consumers” (Hofer, 403). The teaching faculty was clear about the need for students to learn correct citation practices and understand the reasons behind these standards. Sessions on plagiarism encouraged students to blindly follow citation rules, without understanding the reason and importance of the formats to their discipline. This threshold concept is important and explains ethical behavior in a way that seeks to create a climate of respect for authors and their intellectually property.

Designing and Using the E-Booklets

Each e-booklet was formatted into six tips with the first tip encapsulating the over-arching threshold concept, and the other tips explaining strategies, tools, or other sub-concepts. The tips were not written to be used as consecutive steps in a logical process, but were arranged to be used in any sequence, at any time during the workshops giving the students the opportunity to learn and work on skills that they felt necessary. The e-booklets were published using Sigil, a free e-pub editor and Calibre an e-book management software that was used to convert the e-booklets to other digital formats. The e-booklets were then used as the instruction tool in the classroom, and also made available for the students to download to their mobile devices for future use.

Conclusion

During the next year, the author will work with some of the teaching faculty to evaluate and further develop the e-booklets. They will work together to continue to identify “troublesome concepts” that relate to their disciplines and information literacy, with the intention of publishing more e-booklets to address other concepts and information literacy skills.

Works Cited

- Blackmore, M. "Student Engagement with Information: Applying a Threshold Concept Approach to Information Literacy Development." *3rd Biennial Threshold Concepts Symposium : Exploring Transformative Dimensions of Threshold Concepts*. Sydney Australia: n. p., 2010. 1–16. Print.
- Davies, Peter. "Threshold Concepts: How Can We Recognize Them?" *EARLI Conference*. Vol. 44. n. p., 2003. 1–21. Print.
- Davies, Peter, and Jean Mangan. "Embedding Threshold Concepts: From Theory to Pedagogical Principles to Learning Activities." *www.staffs.ac.uk*. Staffordshire University, 2006. Web. 5 Mar. 2014.
<<http://www.staffs.ac.uk/schools/business/iepr/etc/WorkingPapers/etcworkingpaper3.pdf>>.
- Hofer, Amy R., Lori Townsend, and Korey Brunetti. "Concepts for IL Instruction." *Libraries and the Academy* 12.4 (2012): 387–405. Web. 16 Jan. 2014
- Irvine, Naomi, and Patrick Carmichael. "Threshold Concepts: A Point of Focus for Practitioner Research." *Active Learning in Higher Education* 10. 2 (2009): 112-132. Web. 8 Nov. 2013
- Meyer, Jan H. F., and Ray Land. "Threshold Concepts and Troublesome Knowledge (2): Epistemological Considerations and a Conceptual Framework for Teaching and Learning." *Higher Education* 49.3 (2005): 373–388. Web. 14 Jan. 2014.
- "Pearson Student Mobile Device Survey 2013 National Report : College Students." *www.pearsoned.com*. Pearson, 2013. Web. 19 Feb. 2014.
<<http://www.pearsoned.com/wp-content/uploads/Pearson-Student-Mobile-Device-Survey-2013-National-Report-on-College-Students-public-release.pdf>>.
- Pedersen, Sarah. *Learning Communities and the Academic Library*. Olympia: Washington Center for Improving the Quality of Undergraduate Education, 2003. Print.
- Walker, Guy. "A Cognitive Approach to Threshold Concepts." *Higher Education* 65.2 (2012): 247–263. Web. 31 Jan. 2014.
- Wilkinson, Lane. "Bridging the Gaps: Teaching Transliteracy." U.S. Department of Education (2011): 27-35. *ERIC*. Web. ED496788. 5 Mar. 2014.
<<http://files.eric.ed.gov/fulltext/ED526899.pdf>>.

Black-Belt Student Assistants: Safety in the Library

Ellie Kohler
Access and Learning Services Librarian
Rockhurst University
Kansas City, MO

Abstract

In 2012 and 2013, Rockhurst University, a small, private university located in an urban area, experienced a series of events that led to a re-evaluation and update of safety procedures for staff members and patrons. In the process, it became evident that many of the 40 library student assistants needed additional training on all safety issues as well as weather-related events such as tornadoes. Of particular concern was what to do if there was an active shooter situation. In a collaborative venture with Campus Security, Access Services staff instituted a training protocol for the library student assistants. In order to engage the student assistants and help them retain the information, role-playing and live demonstration techniques were employed, and then reinforced with other documentation. This presentation will discuss what procedures were implemented, how the Access Services staff addressed the issue of training the student assistants, and feedback from the library student assistants about the training.

Emergency Weeding! Or, Just-in-Time Collection Development

Barbara Cornelius
Head, Library Technology and Archives
Nebraska Wesleyan University

Margaret Emons
University Librarian
Nebraska Wesleyan University

Martha Tanner
Head, Library Instruction and Reference
Nebraska Wesleyan University

Abstract

Weeding has been on your library's list of long-term goals for a while. You know the project will be complex, requiring careful planning and thoughtful follow-through over months (if not years). Suddenly, your administration shares the good news – a generous donor will fund a first-floor renovation of your building. The bad news - work starts within a few months. Out goes the deliberate timeline; you've got a weeding emergency. Cochrane-Woods Library faced (and is facing) this situation. That the collection was last weeded over fifty years ago certainly added to the difficulty. Staff began the deselection process in July 2013, aiming to reduce the reference collection on the first floor, free-up shelving for relocating materials, and remove obsolete titles. The project is not finished but collections already more reliably support the university's current programs. Discover how library staff designed and implemented an urgent deselection of the collection because of impending construction. Learn when and where they took safe short-cuts, more readily identified weeding candidates, and how access to e-books guided some decisions. The authors will share practical ideas, as well as how approaches to user education and service informed their choices.

Background

Founded in 1887 by the Nebraska Methodist Conference, Nebraska Wesleyan University today is a liberal arts institution of around eighteen-hundred undergraduate and graduate students in over one-hundred programs. Over the years, library collections have lived in several campus locations; housed originally in a third-floor room in "Old Main," they were moved in 1920 to the purpose-built Rachel L. Lucas Library, and finally in 1970 to Cochrane-Woods Library, where they remain. Library staff suspect that the collections have never been systematically weeded, but simply moved en masse into subsequent, larger buildings. For heading off impending space-shortages, this is a convenient strategy but unsustainable. Currently, a tight budget precludes any hope for a new building in the near future; making do with the present structure is the only alternative, and finding that alternative has become critical. Most subject areas are severely crowded, to the great frustration of student-employees who struggle to re-shelve returned books. On-the-fly shifting has become necessary. Worse, continually adding new materials without assessing and removing the old has created difficult-to-use collections unrepresentative of the

curriculum, and inadequately supportive of current academic programs. Staff realize that this predicament did not occur overnight, and it will take time to resolve.

In early 2013 as the previous director retired and the new director began to review library policies, staff established collection development policies in order to start addressing the worsening shelf-space problems. Up to that point, fairly large institutional-wide factors informed the library's plans, including fundamental changes to existing academic programs, an overhaul of the general education requirements, and the newly approved MBA and Nursing degrees. Staff knew that current collections did not adequately support these changes.

Additionally, an intermittent roof leak had damaged materials on the top floor, requiring that staff review, discard, and replace hundreds of books in that area. Staff made plans to revise policies and procedures, inventory and review the collection subject-area by subject-area, meet with academic departments to get their input, and assess damaged materials, and finally to discard what was unneeded. Time seemed adequate to deliberately prepare and schedule without a sense of panic or urgency. Soon, however, two administrative decisions forced staff to move more quickly to the physical removal phase. One of these decisions was a result of university-wide budget reviews and the other the outcome of a large donation specifically made to the library.

In November 2012, as part of a campus SWOT analysis, the university formed several budgetary workgroups. A group assigned to the library surveyed how the library typically purchased materials, and based on their findings they proposed reallocating funds designated for paper and electronic resources. Among their observations were: students and faculty still want printed books, and that these can be more cost-effective; students and faculty seem to prefer some items, such as articles, in electronic format. Most library users often preferred to print out electronic resources because they found hard-copies easier to use.

In early 2013, the workgroup recommended that the library add online books but not at the expense of printed books, and that easily copied/printed-out materials, such as journals and reference items, be made accessible online whenever possible. Thus, print subscriptions were to be dropped in favor of online subscriptions, which called for a fast but thorough review of current periodicals before the end of the fiscal year. Staff freed up space by removing bound back-issues of journals for which online subscriptions were already available through Academic Search Premier, Sage, ScienceDirect, and JSTOR. Additionally, as a blanket-rule, older printed titles were removed for which free, online editions were available, as well as any printed reference materials also held in electronic format.

If this set of decisions spurred staff forward, the announcement that came next had an even greater effect: A generous donor had willed a sum of money specifically to renovate the library. In April 2013 administration shared the specifics. The donation would fund an overhaul of the first floor – where administration had decided to relocate all of the Instructional Technology Department and the Writing Center, which in combination with library services, would form a new “Learning Commons.” A renovation task force met, realizing that accommodating all of this on the first floor would require both sacrifices and creative solutions. The reference librarian at the time, rather than agreeing to move the

computer labs (where the librarians taught and gave research help) to the third floor, proposed the library give up seventy-five percent of the print reference stacks for this new space. Based on the recommendations of the previous SWOT analysis everyone agreed, and in June 2013 this became part of the Learning Commons task force's plan.

The construction work was to start by January 2014 during winter break – weeding had suddenly become an emergency. The idea of “emergency weeding” might sound careless, and likely to end in some measure of disaster. However, the authors were certain that a workable model for deselection under pressure could be devised, while simultaneously building a collections maintenance program.

Review of the Literature

Cochrane-Woods is not the first library to embark on a major deselection project under less-than-ideal conditions, including time, space, and staff constraints -- nor, surely, will it be the last. However, much of the literature on weeding assumes that deselection is taking place under more ideal conditions, with ample time for planning and clear goals, outcomes, policies, and procedures delineated before starting the project. For example, Martin, Kamada, and Feeney write that a formal committee at the University of Arizona Libraries developed a "coordinated, systematic plan to manage the collections" (227) that included objectives, deselection criteria, and a five-year implementation plan and timeline.

Similarly, Mary Francis describes a reference weeding project at Dakota State University that began with "a complete review...to look at the overall state of the collection" (220). The review led to writing goals and policies at the outset, before any weeding took place. Concordia College "recognized the need to implement a comprehensive and systematic approach to weeding" (Soma and Sjoberg 17) and initially spent a semester "researching weeding methods and rationales" (18). In some cases, as in these examples, there is time to tackle the problem in a formal, structured way, at both small and large libraries. However, the literature also suggests that the need to undertake emergency (or, at least, urgent) weeding with more limited resources may be somewhat common. In fact, a recent study of reference collections in ARL libraries of all sizes found that a full 60% undertook a weeding project "in response to a changing space need, e.g., the need for more user space or the consolidation of branch library collections" (King 149) rather than, perhaps, a proactive collection management plan.

Many libraries' deselection experience seems to mirror NWU's, both in terms of the factors prompting a weeding project and the limitations faced in undertaking such a project. Michael Handis writes, "No major weeding project had ever been undertaken in the Mina Rees Library [at City University of New York] up to 2002," but a major space crunch finally dictated such a project (85). "Major projects" at The University of Toledo, including building an information commons on the library's first floor, meant that "the assessment of the library's over one and a half million print volumes became a high priority in a matter of weeks" (Crosetto et al. 30). Moreover, Toledo's "project had to be planned, implemented, and completed within a two-year time frame" (30), a goal they were not able to meet. Fort Lewis College implemented "a focused deselection project implemented with minimal staffing to address critical shelf overcrowding" in a "limited time frame" (Arbeeney and

Chittenden 79). As in other libraries, the overcrowding at Fort Lewis resulted in part from reallocating space to non-library functions and to student study/research. In this instance, librarians had only a summer to identify 4,000-5,000 items that could be weeded.

In response to an urgent need to weed, libraries have developed a variety of approaches to tackle the problem. For example, the starting point for the project isn't always the same. Some libraries, including University of Toledo and Fort Lewis College, started by analyzing ILS data, then moved to physical assessment of selected items. Fort Lewis College used this approach to pare down a list of 20,974 possible weeding candidates to a more manageable 3,900; liaison librarians then reviewed the physical materials on the list according to their subject specialty. Rather than starting from usage or other data, some libraries may begin by weeding in areas where the need is greatest or start by assessing titles taking up the most physical space, such as multivolume sets (see Singer 258). Similarly, staffing and workflow for a weeding project may take any of several forms. In several instances (Toledo, Fort Lewis), student workers were significantly involved in weeding projects, helping to alleviate some demands on full-time staff's time and making it possible to complete work more quickly. However, permanent staff at one more or more levels in the organization generally still review items before their final disposition (see Singer 260; Soma and Sjoberg 23).

In general, it appears that no one model works best for all weeding projects, emergency or otherwise. Libraries need to develop a process that works for them, given their unique strengths and constraints. NWU's library staff utilized some strategies that other libraries had found helpful, but formulated others to fit the particulars of its collection and its history.

Process and Method

Reference

Emergency weeding is never ideal, but the authors decided to use it as a step towards establishing a long-term, library-wide review that would effectively place weeding into an overall collection development scheme.

Public libraries have relied on CREW: A Weeding Manual for Modern Libraries for over thirty years. CREW, standing for "Continuous Review Evaluation and Weeding," is made up of five processes - inventory, collection evaluation, collection maintenance, weeding, and discarding. These processes are meant to be scheduled and executed over a period of time, as an ongoing collection development plan. Academic and public libraries differ in their missions, but they share the common responsibility to support the needs of their community. Nebraska Wesleyan's community is, of course, its faculty, students, and staff. Typically, academic libraries do not discard as often or in the quantities that public libraries do. Cochrane-Woods, however, adapted CREW guidelines as a starting point.

The authors approached "emergency weeding" with two goals, one immediate and the other long-term. First, the reference collection weeding took priority, since the tentatively scheduled renovations required a seventy-five percent reduction in reference holdings. Second, the library would establish sustainable maintenance practices based on CREW's "reverse selection" strategy. To help establish a system for the circulating collections, the Math & Computer Science subject areas were chosen as a test case. Weeding these two areas

(reference and Math/CS) would serve to refine the physical process of identifying candidates for “further consideration.” Just as important, the project would enable staff to focus and refine the reasoning behind deselection decisions.

In June 2013, Cochrane-Woods’ reference librarian accepted a position in Denver, departing in July; nevertheless, the project had to forge quickly ahead. During the search for a new librarian the staff laid out assessment rules. In addition, this change provided an opportunity to rethink the purpose of a reference section. What would it look like, and how should it be used? Throughout this process, the overriding aim has been not only to reduce the size of the reference collection, but to also make it more related to the curriculum and easier to consult. With that in mind, the staff established the remaining “Reference” collection along a “ready reference” scheme. Anything with complex themes, particularly containing longer essays and articles assessing a subject or discipline, would be re-categorized into the circulating collection. The new reference collection would consist of items such as dictionaries and thesauri; certain, but not all, encyclopedias; manuals, directories, atlases, almanacs, legal codes, bibliographies, handbooks, and other materials meant to be consulted quickly.

Since time was short, staff created a list of criteria to simplify decision-making. Initially, all reference items were assessed based on the following: condition, age, relevancy to the curriculum, edition, and format. Based on these rules, staff would:

- remove damaged materials, replacing if warranted
- remove outdated materials, updating if warranted
- relocate older materials to the circulating collection if still relevant
- remove irrelevant, inappropriate materials (as in reading-level and/or scholarly rigor)
- remove older editions if library holds the new edition
- remove titles for which there was online access
- remove redundant materials – repackaged collections of literary criticism, essays/articles, etc.

This list was, and is, fluid. As staff (and the newly hired reference librarian) worked through the respective classifications during the Fall 2013 semester, new criteria was added as needed. For example, in reference the following were identified for removal:

- textbooks
- popular collecting value guides
- pseudoscience (unless curriculum-related)
- multiple copies of the same title/edition
- travel & culture guides
- decades-old training materials
- one-off editions of outdated statistical information
- legal codes and government documents available online
- outdated encyclopedias; encyclopedias aimed at a non-college or higher audience

Although the criteria might seem complicated together, they were very simple to apply rapidly. Additionally, based on these criteria, staff removed *Contemporary Literary Criticism* and *Something About the Author* sets, preparing them for donation to a local high school.

NWU's English department faculty actively discourage their students from using these, and article databases have made them largely redundant. Further, staff relocated the remaining journal indexes to the second floor, shelving them with periodicals.

At Cochrane-Woods, librarians serve as subject/department liaisons responsible for development in those respective areas. Therefore, they reviewed reference holdings in their assigned subjects in order to make the project more manageable. They also took advantage of several assessment tools when deciding what to keep, remove, or replace. Besides their own experience and knowledge, they used *Choice Reviews Online*; book reviews in peer-reviewed journals; *Books for College Libraries*; and subject guides from various sources, such as ALA and professional organizations. Finally, they consulted informally with faculty members from some (but not all) departments. While "best practices" typically recommend that librarians only cull after seeking faculty input, time constraints simply did not allow a series of meetings. Librarians relied on their own judgment and professional experience for the most part, while consulting certain professors when in doubt.

Precise statistics are not yet available – but estimates are that from July to November staff was able to cull around three-thousand items, starting from an initial collection of 9,327. The majority of the removed reference items were placed into the circulating collection, while around five-hundred ready-reference titles were replaced with updated editions. The *CLC* and *SATA* sets totaled around one-thousand volumes. Less than six-hundred titles were actually discarded. Obviously, the collection has not yet been reduced by seventy-five percent, but progress has been significant. Luckily, administration announced construction would be pushed to summer 2015, and so there will be more time to complete the project.

Process and Method

Mathematics & Computer Science

Besides working through the reference shelves, the authors also chose the Math & Computer Science subject area as a test case for circulating materials. They chose it largely for two reasons – one, its titles did not circulate heavily, so they would be able to work in the area without disturbing patrons; and two, the authors thought that identifying obvious candidates for removal would be fairly straight-forward. They assessed and weeded this area and reference simultaneously, although the work was accomplished much more quickly – from start to finish, in about four weeks.

As in reference, staff followed established criteria to remove:

- damaged items
- outdated titles, updating if needed
- older editions of held newer editions
- irrelevant titles
- multiple copies of a title
- print copies for which there was online access
- outdated curriculum/education titles
- textbooks (with a few exceptions)

In practice, following these guidelines allowed staff to identify and remove over one-thousand individual titles. These included manuals for obsolete software; multiple copies of popular titles; programming and math textbooks for classes no longer taught, sometimes four or more editions of the same title; fifty-year-old pedagogical materials aimed at primary and secondary teachers. Materials like these can be very easily identified, often with a cursory glance at the shelves. But even emergency weeding should not mean careless weeding. Assessment tools are available, and librarians should be able to articulate their justifications for removing items. For Math & Computer Science, the authors consulted the same resources as for making decisions in the reference section. In addition, they used the Mathematical Association of America's "Basic Library List" to identify titles to retain. The authors did not necessarily decide to remove materials that did not appear on the list – but with it, they were able to recognize many titles that did not initially appear to be significant.

Clearing space in the Math & Computer Science section has freed enough space to ease some of the congestion in the nearby science sections. Around a half-range of materials have been removed, comprising over one-hundred feet of shelf-space. Student workers have been able to use this as a starting point to shift the entire west side of the third floor collections.

Outcomes and Implications

Following the guidelines the authors developed for their own situation, as well as the principles from weeding guides and other sources, it has been possible to reduce the size of the reference collection and to refocus its purpose. This phase of the project is not complete, but it is clear that the library staff will reach the seventy-five percent reduction goal. Additionally, the strengths and weaknesses of the collections overall are much more clear. The results of the work so far have been mostly as the authors predicted – a great number of outdated and irrelevant items have been removed; gaps and redundancies have been identified; and staff now have information that will allow the budget to be revised and reallocated.

Unfortunately, weeding reference has led to a widespread, unavoidable project mushroom – already-crowded shelves in the circulating collection must accommodate the influx of re-classified materials. This situation has required staff to weed and shift in many other areas, particularly history, literature and health sciences. In these areas, space has been created through removing the aforementioned water-damaged books, and discarding most titles available as e-books. Systematic weeding activities have expanded into political science, business, and criminal justice. Sometimes staff commit a "drive by" weed, having noticed something egregious as they pass through the stacks. "Drive bys" can be effective as long as they do not cause the more methodical weeding to veer off course.

Librarians typically feel a deep responsibility to books, and the decision to discard them can be painful indeed. The authors have kept firmly in mind that Cochrane-Woods Library is neither a Research I institution nor an archives, and also that few of the library's holdings are unique – and this has made sometimes difficult choices more manageable.

Conclusion and Recommendations

Whether or not weeding is done under pressure, thoughtful practices can be observed. While limited time dictated streamlining some processes, such as gathering input and feedback, Cochrane-Woods' strategies were fundamentally thoughtful and considered. Library staff will retain them as part of the long-term plan for ongoing collection assessment and updating. The authors recommend inventorying a subject-area section before starting to weed and developing blanket rules for types or groups of materials, not simply individual titles. Using existing decision-making aids is critical – for example, *BCL*, *Choice* and other reviews, ALA subject guides, professional organization websites, your own institution's course catalogs, and informal faculty consultations. For time's sake, if necessary, forego structured meetings for obtaining feedback. Informal meetings combined with forethought are unlikely to lead to drastic errors, and save time. Importantly, consider where and how discarded materials will be housed or disposed of – for example, the authors created a “free” shelf and also designated a place in technical services for preparing to-be-recycled items out of public view. By following these processes, and modifying them as needed to suit available time and resources, any weeding project can be part of a successful collection development scheme.

Works Cited

- Arbeeny, Pamela, and Lloyd Chittenden. “An Ugly Weed: Innovative Deselection to Address a Shelf Space Crisis.” *Journal of Library Innovation* 5.1 (2014): 78-90. Print.
- Crosetto, Alice, Laura Kinner, and Lucy Duhon. “Assessment in a Tight Time Frame: Using Readily Available Data to Evaluate Your Collection.” *Collection Management* 33.1-2 (2008): 29-50. Print.
- Francis, Mary. “Weeding the Reference Collection: A Case Study of Collection Management.” *The Reference Librarian* 53 (2012): 219-234. Print.
- Handis, Michael W. “Practical Advice for Weeding in Small Academic Libraries.” *Collection Building* 26.3 (2007): 84-87. Print.
- King, Nathaniel. “Nice Vs. Necessary: Reference Collections in ARL Member Libraries.” *The Reference Librarian* 53 (2012): 138-155. Print.
- Larson, Jeannette. *CREW: A Weeding Manual for Modern Libraries, revised edition*. Texas State Library and Archives Commission, 2012. Web. 28 June 2014. <www.tsl.state.tx.us/ld/pubs/crew/index.htm>.
- Martin, Jim, Hitoshi Kamada, and Mary Feeney. “A Systematic Plan for Managing Physical Collections at the University of Arizona Libraries.” *Collection Management* 38.2 (2013): 226-242. Print.
- Singer, Carol A. “Weeding Gone Wild: Planning and Implementing a Review of the Reference Collection.” *Reference & User Services Quarterly* 47.3 (2008): 256-264. Print.
- Soma, Amy K., and Lisa M. Sjoberg. “More Than Just Low-Hanging Fruit: A Collaborative Approach to Weeding in Academic Libraries.” *Collection Management* 36.1 (2011): 17-28. Print.

Virtual Reference on a Dime: Creating a Roaming and Virtual Reference Service on a Shoestring Budget

Lynn Klundt
Reference and Instruction Librarian
Northern State University

Abstract

The Beulah Williams Library, Northern State University (NSU) campus in Aberdeen, South Dakota, purchased a 16GB 4th generation Apple iPad as the main tool for the creation of a roaming and virtual reference librarian program in the summer of 2013. The program was created with a goal of better meeting students' information seeking behaviors, needs, and expectations in the hopes of improving information literacy skills. During the planning stages of the program, campus-wide budgetary cuts created a funding strain on library resources and limited the purchasing capabilities of the roaming and virtual reference librarian program. What may have seemed like a major setback to the program, turned into an opportunity for creativity and ingenuity from a small library staff to develop an enhanced reference program utilizing the technology of mobile devices with limited funds and resources.

Introduction

Northern State University (NSU), a liberal arts college with a strong emphasis in teacher education and business, is home to 4,115 undergraduate and graduate students. The college offers 41 bachelor, eight associate, and nine masters degrees both on campus and virtually ("About"). According to the Institute of Education Sciences, 80 percent of the students on the NSU campus in Aberdeen, South Dakota are 24 years old or younger, making the majority of the student body a part of the millennial generation, a generation characterized by their affinity for technology and alternative learning styles ("National Center for Education Statistics"). The NSU Beulah Williams Library (Williams Library) is a small academic library with four full-time librarians who are responsible for reference, instruction, database and system maintenance, and collection development. The library houses approximately 250,000 items and subscribes to nearly 80 electronic databases ("About the Library").

During the spring 2013 semester, the Williams Library reference and instruction staff began planning for a pilot roaming and virtual reference librarian program with the goal of better meeting students' growing information literacy needs and expectations. In the last seven years, the library had been experiencing a steady decrease of in-person reference questions and attributed the decline to the changing information-seeking behaviors and preferences of students as well as the growing dependency on mobile technology and independent research. In July, 2013, the library purchased a 16 GB iPad 4 tablet, cover, and a VGA adaptor to aid in the roaming and virtual reference program. Shortly after the purchase the NSU campus made significant budgetary cuts across all departments. The library was asked to make a 15% cut to its book and electronic resource budget, causing the discontinuation of lower performing databases and the tightening of library spending. These budgetary changes affected the development of the roaming program in that no extra funding was available to hire consultants, additional supportive staff, or technology to enhance the program. The NSU

librarians took on the duties of planning supportive programming, marketing, and staffing for the pilot program.

The Williams Library roaming librarian and virtual reference program provided the university librarians a unique opportunity to express the library's desire to meet students at their point of need. This article discusses millennial research behaviors and needs and how libraries are meeting those needs. The authors describe the Williams Library roaming librarian and virtual reference program goals, iPad set up and cost of services and outreach efforts.

Review of Literature

Millennial student information seeking characteristics

Today's college students are technologically savvy and tend to be reliant on the internet to answer everyday questions and to gather research materials for assigned papers. Carlson describes millennials as individuals born between 1980 and 1994 who expect education to be tailored to where, how, and what they wish to learn; prefer to work in groups, utilize mobile technology, and are very competent at multitasking. The author goes on to say that millennial students are "more apt to take control of their learning and choose unconventional, technological methods to learn better."

The way many undergraduate students approach research is more directed toward the convenience and ease of obtaining information than the traditional method of asking for assistance or utilizing academic research databases and library catalogs. Dickey and Radford explain that "[l]ibrarians are finding that they must compete with other, more convenient, familiar and easy-to-use information sources [because] [i]n the current information environment, there is anecdotal evidence that people will sacrifice content for the convenience of accessing information sources" (179). Thompson reports on a study completed by the OCLC (Online Computer Library Center) that surveyed 1,050 United States undergraduate students and asked them to rate their perceived information-seeking abilities (262). The study found that "[t]hree out of four [students] agree completely that they were successful at finding the information they need, and nearly two-thirds strongly feel they know best what information to accept from the web" (263). What the study actually found was that only about 50 % of those students who completed the survey were actually proficient in selecting high quality internet resources. This was shown by instructor input that explained while students were able to find information easily by using web resources; they were fairly ineffective in evaluating those resources for academic purposes (263).

Lippencott states that "[b]oth students and faculty believe that the library is doing a poor job with helping students discern which web resources are suitable for academic work." One way many libraries are addressing faculty and student criticisms regarding inefficient information evaluation skills is by creating roaming librarian services. Sonntag and Palson explain that students rely on search engines to answer a majority of their research questions, but are bombarded with so much information and a lack of skills to evaluate information that librarians need to develop a "place, apart from the traditional reference desk to provide adequate assistance to these users" (2). Sharman and Walsh explain that the benefits of this service allow librarians to provide more one-on-one research assistance and instruction in

environments where students are most comfortable. This service also gives librarians the opportunity to educate students in how to evaluate web resources in a more personalized method. The idea of a roaming librarian is not a new concept, but with the introduction of mobile technology, librarians are able to move in and around the library, classroom, dormitories, and social environments with ease and with positive student responses.

Today's college students do not access information like many academic librarians expect; libraries are no longer the one place students look to gain the resources they need to complete a research paper, and librarians are no longer the first person they approach with research questions. While many students believe they have the skills necessary to effectively evaluate and ethically write good papers, statistics show they are falling increasingly behind prior generations. It is vital that libraries look at the information-seeking behaviors of students and change their services to meet those needs. Programs like roaming librarians and virtual reference services should become the norm if libraries hope to stay relevant to current university students. Leonard states it best: "If librarians and their staff remain in libraries, they will soon be a place on the list of endangered species" (29).

Beulah Williams Library Roaming Librarian and Virtual Reference Purposes and Goals

The Williams Library employs three full-time reference and instruction librarians who are responsible for providing support and research assistance, administering information literacy assessments, as well as creating library programming to students, faculty, staff and the community. The goals of the Williams Library roaming librarian and virtual reference program are to improve librarian outreach to on-campus and online students to increase comfort and confidence in approaching reference and instruction staff for research assistance and to better equip students for academic-level research. The development of a roaming librarian program, coupled with important enhancements to the existing virtual reference services, were incorporated as an answer to declining in-library reference questions and low information literacy scores on Project Standard Assessment of Information Literacy Skills (SAILS) assessments. Results from the Project SAILS assessment found a large gap between incoming freshmen's perceived and actual information literacy skills. As the above literature review reveals, many students believe that they possess the necessary skills to find information by utilizing the web but many of these students are compiling research assignments that use questionable research materials and ethics.

The librarians at the Williams Library believe that in many cases the reference desk itself is a barrier between students and the reference staff. As is typical with many reference desks, students tend to approach librarians as a last resort or with embarrassment. A foundation of the roaming librarian program is to give students more ease when asking for help. By leaving the boundaries of the desk, librarians are free to roam the library floors to look for individuals in need of help while utilizing mobile technology to assist students that may be in need of assistance virtually through chat applications. Another way the librarians can increase the effectiveness of the roaming librarian program is to leave the library all together. Librarians utilize mobile technology to provide programming and educational opportunities to students in residents' halls and other centralized study locations. These mini instructional

sessions can create an informal atmosphere by showing students that librarians are willing to leave the walls of the library and will provide students with a more accessible view of library services.

iPad Set-up, and App Selection

The Williams Library purchased a mobile tablet as the primary tool for the roaming librarian and virtual reference program. The program was supported by a small budget (around 1,000 dollars) for application and hardware purchases. The electronic resources librarian created a list of suggested devices, accessories, and pricing that would support the pilot project. Much of the research in choosing the necessary items came from personal use, product and scholarly research, and suggestions from other reference and instruction librarians. The list included two tablets, a 16 GB Google Nexus 10 and a 16 GB Apple iPad 4. Due to the project's small budget, the library decided to purchase only one tablet to be shared by the library's three reference and instruction librarians.

The Apple iPad 4 was chosen as the main tool for the pilot project because of its popularity with students, its intuitive user interface, and the wealth of free and inexpensive applications. Duncan et al. describes the iPad as having a "natural user interface with touch screen voice recognition possibilities [that are] more human, less mechanical, and therefore easier to use" (202). MacDonald and McCabe go on to explain that the iPad is most beneficial for roaming and virtual programming because of its large screen space, light weight, impressive battery life, Wi-Fi connectivity, and its smartphone-like operation which offers push notifications that can visually alert a librarian of incoming chat requests and emails.

The majority of applications added to the iPad were free; however the library did purchase the Keynote and OneTeam apps because they were essential to the roaming and instruction components of the project. The iPad was first set up by NSU's technology services during which they added the necessary administrative accounts and networking and security software. The library then created a secondary account in which the electronic resources librarian could download free applications; any paid apps, per university policy, had to be purchased through campus financial services.

The electronic resources librarian was responsible for training the reference staff and setting up the tablet, which included choosing the applications for reference, instruction and miscellaneous daily tasks. The criteria for choosing applications for the iPad were focused on mimicking the operations of the reference desk. The roaming tablet needed to allow librarians the same ability to answer incoming texts and chat reference requests, allow for easy document storage, collaboration, and allow for tools that aided in instruction and social media communication efforts. Many of the applications were chosen because of requests from librarians and reference staff, and because they have received positive reviews from the Apple iTunes store or from websites like appolicious.com and appadvice.com (see table 1).

Table 1
List of Applications for Roaming and Virtual Reference Program

Application	Description	Cost	Type
Dropbox	Cloud-based document storage.	Free	Document Sharing
Evernote	Cloud-based note creation, reference staff communication center, document storage.	Free	Document Sharing
Google Drive	Cloud-based file syncing and sharing. Allows for the creation of documents and spreadsheets. Allows for large-file sharing.	Free	Document Sharing
eBrary	Provides the ability to search, access and download institution acquired eBrary e-books.	Free	Reference and Instruction
EBSCOhost	Provides access to library subscribed EBSCO databases. Only available for iPhone or iPod devices.	Free	Reference and Instruction
FaceTime	Application for video chat between Apple devices. Application comes with the iPad.	Free	Reference and Instruction
Keynote	Apple's presentation application created especially for the iPad.	\$9.99	Reference and Instruction
OneTeam	Chat program that allows for mobile integration of programs like LibraryH3lp.	\$5.99	Reference and Instruction
Skype	Video chat program. Allows free voice, instant message or video calls.	Free	Reference and Instruction
WorldCat Mobile	Provides access to the WorldCat catalog.	Free	Reference and Instruction
YouTube	Application to show YouTube videos. Works well with Keynote application for in-class instructional videos.	Free	Reference and Instruction
Facebook	Mobile Facebook application.	Free	Social Media and Marketing
Moldiv	Photo collage program. Good for creating promotional photographs for marketing and social media.	Free	Social Media and Marketing
Pinterest	Mobile Pinterest application.	Free	Social Media and Marketing
Twitter	Mobile Twitter application.	Free	Social Media and Marketing

Two notable applications that were specifically added to the iPad are OneTeam and Keynote. These applications did have a cost, but were necessary for the iPad to function like the reference desktop computer. The OneTeam application was added to the iPad because of a suggestion from LibraryH3lp, the library's main chat provider. OneTeam allows for services like LibraryH3lp to be added onto mobile devices. MacDonald and McCabe state "LibraryH3lp was built on XMPP or Jabber standard chat protocol which makes it possible to pick from a variety of chat aggregators using the same protocol." Keynote is Apple's version of PowerPoint and was added because of its unique cloud function and attractive slide show capabilities. According to Apple's description:

Keynote for iOS makes it simple to create and deliver beautiful presentations — with nothing but your fingers. Powerful tools and dazzling effects bring your ideas to life. You can work seamlessly between Mac and iOS devices. And work effortlessly with people who use Microsoft PowerPoint.

For easy access to the library's catalog, interlibrary loan module, statistical websites, and important library bookmarks were added to the iPad's main page.

Outreach and Roving Efforts and Student Reactions

During the pilot project, the Beulah Williams' librarians provided roaming services in the library as well as in a freshmen dormitory. The Beulah Williams Library is a large, three-story building that provides a variety of spaces for students to study and complete research: the basement is where the library houses its archival materials, the main floor is where students can work in groups and tends to be a more high traffic area, and the third floor is the designated quiet study area. The reference desk is situated next to the circulation desk for a one-stop service area. One major shortcoming of this layout is that, with the size of the building and the location of the reference staff, many students do not make the effort to leave their work areas to ask librarians questions. Within the library walls, the librarians utilized the iPad to roam between the two main floors to offer student's a less formal approach to gaining research assistance.

Because of low Project SAILS assessment results, the librarians chose to focus on freshmen students for the roaming project. By working with Residents Life, the librarians were able to partner with the freshmen hall director and residents' assistants to create two programs with the goal of reaching out to students in need of more research assistance. The first program was provided during the fall 2013 finals week. Marketing materials were created by library staff to let students know when the librarians would be available in the freshmen hall; the materials were shared on the library's Facebook and Twitter account as well as the university's Twitter account. The librarians also sent emails to faculty members who assigned writing asking to share the event with their classes. The first program was very informal; the librarians visited the freshmen residence hall three times during finals week for three hours at a time to assist with final papers and research. The residents' assistants made rounds throughout the evening letting students know the librarians were available to answer

any questions. This outreach effort was not met with much enthusiasm. The number of students who approached the librarians was very minimal.

The second outreach endeavor was provided during midterm week, spring semester 2014. Programming was created to pique the interest of student researchers. The librarians teamed up with a residents' assistant to put on an educational program about effective researching on the web utilizing Google. The program was entitled "Research Rescue: using google the right way." The program was created on the iPad utilizing the Keynote and YouTube applications and displayed on a television in the hall commons area. The response was positive because the residents' assistant who hosted the program was more successful in finding students to attend the library instructional session because of his personal connection with the students. The students were receptive and welcoming of program and even appeared to be excited about the subject. Many of the students admitted that they were unaware of the services that the library provides and were now more apt to utilize them for future research assignments.

Difficulties

Anything that incorporates technology is not without its difficulties. Throughout the 2013-2014 academic year, the iPad had difficulty staying on the university's Wi-Fi server, making it fairly glitchy when making rounds in remote areas of the library. This issue has yet to be remedied, but the library is working with Technology Services to find a permanent solution. Another difficulty with the iPad was not from the tablet itself, but from the administrative limitations put on the device. When the iPad was set-up by Technology Services, they carried the administrative rights to the device and changed some of the default security settings. One of the most difficult settings to work around was the auto-lock. The iPad would automatically lock after five minutes of inactivity making the user have to log-in again and link back up to the Wi-Fi server. This made it very difficult to utilize the device when roaming for any amount of time over the pre-set limitation. After expressing the library's need to have this limitation removed from the iPad, Technology Services removed the auto lock at the end of the academic year.

Making the iPad mimic the reference desktop computer remains a difficulty. The Williams Library reference staff maintains some hesitancy with using the tablet for instruction, research, and reference services because of the tablet's unique functionality and certain database applications. Large database aggregators like EBSCOHost, and eBrary are perceived as being more difficult to use on the tablet and do not provide the ease of access and retrieval like the vendors' desktop websites. It is the author's belief that as the roaming program becomes more streamlined into the reference staff's daily activities and as mobile technology becomes more fine-tuned, these issues will resolve.

Finally, connecting with NSU students on a personal level is still a difficulty. Even when the librarian is roaming throughout the library or providing instruction sessions in residents' halls, students are hesitant to approach the librarian to ask reference questions. As it was discovered with the roaming programs in the freshmen residents' halls, the library was far more successful in gaining student engagement with the help of the residents' assistants than

on their own. The importance of cultivating the relationship between various university entities like Residents' Life remains vital for the roaming program to be successful.

Conclusion

During a recent survey of NSU students, the majority of students stated that they believed that the roaming librarian program would be beneficial to them, but that they were unaware of the service. NSU librarians plan to build the current programming by increasing the frequency of librarian visits to residents' halls as well as the number of halls they visit. The librarians are also planning to create more of a presence in the upper level of the library by incorporating a roaming station where students can receive the same type of help they would on the main floor reference desk. It was found that partnering up with campus Residents' Life helped tremendously with the effectiveness of the roaming librarian programming. The library does need to focus more on how to effectively market this resource to students in a way that will engage and invite them to utilize the library's resources and expertise.

The Williams Librarian roaming and virtual reference program is still very much in its pilot stages, but the past year has shown that they are able to increase their availability to students with minimal cost to the library's budget. The cost of purchasing the iPad and the necessary supportive equipment cost the library around \$700.00. With a little creativity and ingenuity librarians are able to create a program that can help engage students to increase information literacy skills in a way that is conducive to their unique study and learning expectations.

Works Cited

- "About." *www.northern.edu*. Northern State University, 2013. Web. 11 April 2014.
- "About the Library". *www.northern.edu/library*. Northern State University, Beulah Williams Library, 2013. Web. 11 April 2014.
- Carlson, Scott. "The Net Generation Goes to College." *The Chronicle of Higher Education* 52.7 (2005). Web. 1 May 2014.
- Connaway, Dickey, and Marie L. Radford. "If it is too Inconvenient I'm not Going after it:" Convenience as a Critical Factor in Information-seeking Behaviors." *Library & Information Science Research* 33 (2011): 179-190. *ScienceDirect*. Web. 11 April 2014.
- Duncan, Vicky, et al. "Mobile Devices and Their Use in Library Professional Practice: The Health Librarian and the iPad." *Journal of Electronic Resources Librarianship* 25.3 (2013): 201-214. *Academic Search Complete*. Web. 21 May 2014.
- Leonard, W. Patrick. "Libraries Without Walls Field Service Librarianship." *Journal of Academic Librarianship* 20.1 (1994): 29. *Academic Search Complete*. Web. 12 May 2014.
- Lippincott, Joan. "Net Generation Students and Libraries." *Educause* (2005): 56-66. Web. 28 Apr. 2014.

“Keynote.” Apple.com, 2014. Web. 13 June 2014.

MacDonald, James R.W. and Kealin McCabe. “iRoam: Leveraging Mobile Technology to Provide Innovative Point of Need Reference Services.” *Code4Lib Journal* 13 (2011). Web. 11 June 2014.

National Center for Education Statistics. “Northern State University.” Institute of Education Sciences 2014. Web. 23 April 2014.

Solorzano, Ronald Martin. “Adding Value at the Desk: How Technology and User Expectations are Changing Reference Work.” *The Reference Librarian* (2013): 89-102. *Education Research Complete*. Web. 5 May 2014.

Sonntag, Gabriela and Felicia Palsson. “No Longer the Sacred Cow - No Longer a Desk: Transforming Reference Service to Meet 21st Century User Needs.” *Library Philosophy and Practice* (2007): 1-16. *ProQuest Research Library*. Web. 7 May 2014.

Sharman, Alison, and Andrew Walsh. "Roving Librarian at a Mid-Sized, UK-Based University." *Library Technology Reports* 48.8 (2012): 28-34. *Academic Search Complete*. Web. 27 June 2014.

Thompson, Sara Q. (2011). “Setting up a Library iPad Program: Guidelines for Success.” *Guidelines for Success* 72(4): 212-236. Web. 11 June 2014.

Wikiality Redux

Pamela M. Salela
Associate Professor, Library Instructional Services Program
University of Illinois
Springfield, IL

Kara McElwrath
Assistant Director, Client Services, Information Technology Services
University of Illinois
Springfield, IL

Abstract

Wikipedia was launched on January 15, 2001. In the early, evolutionary years of Wikipedia, it was the standard practice of librarians to teach students what NOT to do - that is, use Wikipedia as an authoritative source of knowledge. Stephen Colbert famously even made comic use of those who relied too heavily on Wikipedia as their primary source of information with his spoof skit "Wikiality".

Fast forward to 2014, and we find that Wikipedia has evolved into a very sophisticated user-created encyclopedia of information on the web that has achieved a level of credibility that the skeptics never believed possible. Wikipedia has become a sophisticated and dynamic tool that provides a rich canvas for teaching information literacy, critical thinking and knowledge creation. Drawing on the example of a class project created by a faculty member, Michael Murphy, in the Women & Gender Studies Dept. at UIS, the presenters will demonstrate how to utilize Wikipedia to teach the core ACRL Information Literacy Standards and then some. The presenters will provide a web site created by our savvy Educational Media guru, Kara McElwrath, that provides all of the fundamentals for bringing students, faculty and librarians up to speed on using Wikipedia as a classroom curriculum tool.

Index

A

Ajmi, Ayyoub · 106
Alexander, David L. · 31
Ambra, Stephen · 16

B

Black-Belt Student Assistants: Safety in the Library ·
130
Brunk, Angie · 38
Building a Student Employee Program Based on
Professional Development · 58

C

Campbell, Edith A. · 39
Capturing Meaningful Data at the Reference Desk · 69
Carncross, Mahrya · 48
Channeling Your Inner Leader: Library Project
Management for All · 97
Clark, Melissa · 49
Coleman, Tara · 8
Cornelius, Barbara · 131

D

Dawes, Lorna · 124
Dugas, Corie · 97

E

Emergency Weeding! Or, Just-in-Time Collection
Development · 131
Emons, Margaret · 131
Evaluating Search All: Custom Discovery Search Tool ·
96

F

Frey, Susan M. · 22
From Old Laptops to DIY Digital Displays · 106
From Reactive to Proactive: Cross-Departmental
Collaboration to Minimize Access Interruption
Reports · 89
Fullerton, Adam · 58

G

Going the Distance but Doing It Our Way: An
Embedded Librarian Program at a Small University ·
65
Google Scholar Metrics: A New Tool for Faculty to
Track Their Publication Citations · 78

H

Harlan, Amanda · 8
Hébert, Sarah · 16

I

Innovation in using Technology for Library Services ·
105

J

Johnson, Karen · 58

K

Klundt, Lynn · 139
Kohler, Ellie · 130
Kraljic, Mary · 49
Kuban, Adam J. · 79

L

Let's Give This Tree a Friend": Channeling Bob Ross in
Faculty-Librarian Partnerships · 79
Librarians Going Mobile: Applying "Threshold
Concepts" To The Design Of E-Booklets for Library
Instruction. · 124
Libraries in Lean Times: Increasing Efficiency,
Improving Services, and Cutting Red Tape · 49
Library Social Media: What Do Students Want? · 38
Light, Ruth A. · 89

M

Marrying the Old and the New—Using Biophilic Design
and Collaborative Learning to Create an Optimal
Library Instruction Environment · 16
McElhinney, Kathleen A. · 31

McElwrath, Kara · 148
Meldrem, Joyce A. · 15
Miltenoff, Plamen · 115
Mitchell, Michael R. · 69
Moving to a Team Based Library Service Model · 114
Mulligan, Laura MacLeod · 79
Muyumba, Valentine K. · 22

N

Navigating Relationships with IT: Strategies for Small and Mid-Sized Institutions · 1
New Collaborations: Bringing Metadata and other Technical Expertise to the Classroom · 8

P

Paltz, Catherine · 31
Patron Driven Acquisitions for Collection Development · 31
Perpetual Motion: Running a 24/7 Library in a 9 to 5 World · 107
Profit, Steven K. · 64

R

Rayl, Heather M. · 116
Rod-Welch, Leila June · 2

S

Salela, Pamela M. · 148
Schnellert, Gary · 115
Smith, Gretchen M. · 65
Stress got you down? Don't frown! Stop by the Rod Library and clown around! · 2
Sutthill, Susan · 49

T

Tanner, Martha · 131
Team-Based Learning and Information Literacy · 48
The Cheese Has Moved -- Long Live the Cheese: A Framework for Collective Change Management · 22
The Value of Collaboration in Demonstrating Your Library's Value · 15
Think About It: Learning Changes the Brain · 39
Turvey-Welch, Michelle · 8
Tweeting and Pinning: Collaborative Research Using Social Media · 115

U

Using Graphical Depictions of Statistics to Evaluate Collections in an Academic Library · 116
Using the Dell S500wi Interactive Projector for More Engaging Library Literacy Instruction · 64

V

Vaughn, Chris · 105
Virtual Reference on a Dime: Creating a Roaming and Virtual Reference Service on a Shoestring Budget · 139

W

Wanner, Judy · 114
Weir, Ryan · 116
Welker, Josh · 1
Wikiality Redux · 148
Withers, Rob · 107

Z

Zhuo, Fu · 78