

The impact and benefits of Learning 2.0 programs in Australian libraries

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Abstract:

This paper outlines the development and research methodology of the CAVAL 2009 Visiting Scholar Research Project, Measuring the Value and Effect of Learning 2.0 Programs in Libraries. Created to include all staff in a learning activity and offered to all via a Creative Commons license, some LIS practitioners have lauded Learning 2.0 programs as a successful way to engage staff. Replicated more than 500 times across the globe in various types of libraries and over 30 times in Australia alone, this project explores the true impact of the program on Australian libraries

Introduction

"I believe that this has been one of the most transformational and viral activities to happen globally to libraries in decades."

Stephen Abram, Stephen's Lighthouse, February 5, 2008

The genesis of Learning 2.0 began with an article by library futurist Stephen Abram. "Helene Blowers of the Public Library of Charlotte & Mecklenburg County (PLCMC) took the article "Things You (or I) Might Want To Do This Year" by SirsiDynix's Stephen Abram and distilled it down to 23 things that she wanted her staff to understand through hands-on experience," Hastings noted in a 2007 Library Journal article. Blowers recognised "that librarians need to know how to participate in the new media mix if libraries are to remain relevant." In Wired magazine's online companion, Hanly (2007) reported the plan was to include all staff in learning. "Blowers challenged her 550 staffers to become more web savvy. Using free web tools, she designed the program and gave staff members three months to do 23 things."

Since 2006, libraries around the world have offered variations of the "23 Things" for their staff based on the all-staff inclusive learning program developed at the PLCMC. At last count, program creator Helene Blowers, now Director of Digital Strategy at the Columbus Metropolitan Library, reported in School Library Journal "the program had easily reached more than 500 libraries in 15 countries in just two short years" (2008).

More recently, Blowers (2009) estimated close to 1000 libraries and organisations have used the program:

"Don't ask me the number of libraries or organizations? With programs having been run by the National Library of Norway, the State Library of Victoria, Maryland public libraries statewide, 23 Things on a Stick for multiple libraries and organizations, I really have no way of knowing the total impact or number of organizations that have adopted the program. But from my *delicious* links and growing communications folder I can tell you this... the number is definitively over 700 and more then likely hovers somewhere just under 1000 organizations worldwide."

Created to introduce staff to the emerging "Web 2.0" tools of the day, the programs have evolved as new tools are introduced and various practitioners report on successful implementations of the course. Some have called the program transformational (Abram, 2008) while others have lauded its ability to bring staff together in a common goal: learning emerging technologies. Lewis (2008) noted "the Learning 2.0 program had a great impact on staff, who now know they are capable of learning new technologies." Gross and Leslie (2008) reported success with the program in an academic library setting but noted "to our knowledge, no formal evaluation of Learning 2.0 has been conducted. However, the take-up rate among libraries worldwide has been impressive and stands as an endorsement of the program. The accolades from enthusiastic library staff who have undertaken Learning 2.0, mainly in the USA, can be found on the biblioblogosphere."

Replicated across the globe, the program has been touted as a means to not only educate staff about emerging social technologies but as a method of moving libraries

forward into a future of 21st century innovation (Lewis, 2008), openness and transparency (Casey & Stephens, 2008). The purpose of this study is to quantify and evaluate the effectiveness of such programs in Australian libraries, focusing on the public library and academic library setting to develop an exemplary model for more libraries to use for staff education.

Literature Review

Web 2.0 & Social Tools

The pace of technological change is ever increasing, and librarians can find themselves sometimes overwhelmed by all of the new tools and new discussions playing out at library conferences, on discussion lists, and in the professional literature. This wave of tools and social software on the World Wide Web has come to be called by some Web 2.0.

In *Redesigning Library Services*, Buckland (1992) argued that emerging technologies such as computers would lead to new and improved library services grounded in the mission of libraries. Web 2.0 describes online applications that allow Internet citizens to create, change, and use content. O'Reilly detailed the origin of the term in his 2005 article "What is Web 2.0?" In the midst of discussion and planning sessions for an upcoming conference, O'Reilly and his group of World Wide Web developers realised that a new Web was born after the dot-com collapse of the late 1990s. This Web, like a second-generation software issue, they dubbed "Web 2.0." O'Reilly (2005) later defined the term again, in what he deemed a "compact definition:"

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation," and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.

In "Web 2.0 in Libraries: Best Practices for Social Software" for *Library Technology Reports*, Stephens (2006a) defined Web 2.0 as:

...the next incarnation of the World Wide Web, where digital tools allow users to create, change, and publish dynamic content of all kinds. Other Web 2.0 tools syndicate and aggregate this content. We will all be publishers and creators of our own information and entertainment channels with these applications (p. 8).

Others such as Richardson (2006) have described Web 2.0 as the Read/Write Web, where users not only access content, they add to it. Because these tools allow people to make connections, carry on conversations, and collaborate, other terms used are social software and social computing. These newer innovations in Web interactivity lead some librarians to utilise new tools to create a two-way or "read/write" environment.

While some see “Web 2.0 as hype and hyperbole, others can see beyond the buzzword to a set of ever-evolving tools that can benefit online citizens” (Stephens, 2006a, p.6) to create user-centred conversations that play out across blogs, wikis, Flickr or Twitter via comments or tracked discussions. With these tools, connections are made between folks who have like and unlike viewpoints. With these tools, collaboration is possible despite the barriers of distance and time. With these tools, community is created and enhanced, sometimes between the online and physical realms.

Stephens (2006a, 2007a) noted many examples of libraries and librarians involved in creating mechanisms for conversations and connections via these social tools, enhancing communication with users, from academic librarians reaching out to faculty and students, public librarians reaching patrons on the Web, school librarians creating spaces for collaboration and learning and special librarians finding new ways to deliver information to clients and staff.

Learning 2.0

In August 2006, the Public Library of Charlotte Mecklenburg County held a technology summit for library staff. Michael Casey, originator of the Library 2.0 philosophy and author of the LibraryCrunch blog, and Michael Stephens, Instructor at Dominican University’s graduate School of Library and Information Science and doctoral candidate at the University of North Texas, opened the day with presentations about the 2.0 world. Then, the staff was introduced to a new program: Learning 2.0.

Conceived by Helene Blowers, Public Services Technology Director for PLCMC and blogger at LibraryBytes (<http://www.librarybytes.com/>), the Learning 2.0 online course guided library staff through a set of “23 Things” they can do in the new Web:

Learning 2.0 is online learning program that encourages staff to learn more about emerging technologies on the web that are changing the way people, society and libraries access information and communicate with each other.

Over the course of the next eight and a half weeks, this website will highlight “23 Things” and discovery exercises to help staff become familiar with blogging, RSS news feeds, tagging, wikis, podcasting, online applications, and video and image hosting sites.

Any staff who completed all of 23 Things received an MP3 Player and was entered in a drawing for a laptop and other prizes at the library’s staff day. Blowers stressed that she wanted staff to take ownership of their own learning. No training sessions were given. Staff were to read the learning modules and then explore a site such as Flickr, YouTube or a variety of other Web-based applications.

Blowers (2006) discussed the goals of “Learning 2.0” at the Internet Librarian Conference in Monterey, California:

- Introduce staff to new technologies available on the web.
- Encourage staff to take responsibility for their learning.
- Reward staff for taking the initiative to complete 23 self-discovery exercises.

Free & Open for the International Library Community

Because PLCMC and Blowers offered the program online for use via a Creative Commons license, the model struck a chord with the library community and Blowers (2008b) reported other US libraries, library systems and international libraries were utilising the system to educate staff on the Read/Write web. “By my account, the program had easily reached more than 500 libraries in 15 countries in just two short years,” she noted.

Right after the original PLCMC launch, Stephens (2006b) urged librarians to be present in the new Web and to take an example from the PLCMC model: “Do not be afraid of these tools.... So don't be shy. Trust! Try out a few of the social tools. Try a group activity first! Follow what the folks at PLCMC are doing with learning 2.0 – library wide, open and free!”

Others, such as Maxymuk (2008), lauded the open nature of the program and the end result of acquainting librarians with blogging. “No project has added more blogs to the biblioblogosphere than Helene Blower’s Learning 2.0 course, used by libraries all over the world,” Stephens (2007c) argued. As a means to teach staff what blogs and other tools can do, “there's nothing better than actually doing it.” Librarians and staff explore, play and report out on their experiences via their blogs. Who knows how many may continue after the course is done, and how many may become vibrant voices within the biblioblogosphere.

One of the first programs to duplicate Blowers’ model was Yarra Plenty Regional Library in Victoria, Australia, where administration utilised the program to educate staff about emerging social tools that would figure into the library’s strategic plan (Lewis, 2008). Yarra Plenty Regional Library CEO Christine Mackenzie addressed the program in a talk at the Public Libraries: Building Balance conference in Adelaide in August 2007. “PLCMC generously licensed their program under Creative Commons, allowing libraries all around the world to access the learning modules. It has received wide recognition.”

The launch of a Learning 2.0 program became a popular library staff institute activity at many libraries throughout 2007 and 2008. School Library Journal offered a version of the program called “All Together Now” for anyone one in the world who wanted to follow along, featuring “12 Things instead of the usual 23 (Kenney, 2008). Lauding the programs, Casey and Stephens (2008) “cheered” Learning 2.0 libraries in a “Cheers & Jeers” edition of “The Transparent Library” column: “Cheers to the widespread librarians, library staff, administrators, trustees, and others from libraries small and large who have participated in localized versions of Helene Blowers's Learning 2.0 program. As we write, the entire state of Minnesota is running the

program for all interested parties, reinforcing the idea that inclusive, self-directed learning applied to emerging tools can bring people together and get them talking.”

The program also had an impact on library training programs noted Hough (2006), a librarian and trainer, including:

Stop trying to provide step-by-step directions....Try to approach the class as an opportunity to help participants leave with increased independence, increased confidence, and an increased awareness of the potential benefits and applications of the technology in their own lives.

This is a step toward adopting a 2.0 philosophy for your library. The principles of the Read/Write Web, such as trust, experience and collaboration, can also be useful for shifting your library staff to a newer view of learning, interaction with users and service.

The self-directed, Web-based learning program presented a process “that all librarians should follow, even though we doubtless will end up in different places” (Maxymuk, 2008).

Institutional Impact on Libraries

The literature contains articles detailing the impact and success of the Learning 2.0 program in both scholarly and professional publications. Blowers (2008b), Stephens (2007b), Hastings (2007), Kenney (2007) noted successful programs and anecdotal evidence of institutional impact in professional journals, while others, such as Lewis (2008), offered a case study approach in scholarly or peer-reviewed titles. “I believe that this has been one of the most transformational and viral activities to happen globally to libraries in decades,” noted Abram (2008) in a blog post at Stephen’s Lighthouse.

The librarians at Multnomah County Library in Oregon wanted their program to be “among the best” offered so far and augmented the program with “Learning 2.0 Guides,” staff from throughout the system who could answer questions, and devoted a regularly scheduled staff training session to questions and answers about the tools (Larsen, 2008).

One such case study, featuring Santa Cruz Public Library, offered this overview of the program and its impact:

23 Things @SCPL is also the largest computer technology-training project in the history of Santa Cruz Public Libraries. It has fundamentally changed the staff's way of thinking and working in the 21st century. Voluntary by nature, and open to all regular employees, it mobilized more than two thirds of the staff. A total of 98 people signed up for the program during its length, from 17 September 2007 through 18 January 18 2008. (Titangos & Mason, 2009)

Another scholarly article highlighted the implementation of a Learning 2.0 program in a university library. Anecdotally, fewer academic libraries were offering Learning 2.0 than public library counterparts. Edith Cowan University Library was the first

Australian academic library to offer the program and Gross and Leslie detailed the rationale, structure and related the success of the program to adult learning principles and immersive learning environments (Gross & Leslie, 2008). The librarians at Edith Cowan also ran focus groups to evaluate the effectiveness of the program.

Transparency & Play

The discussions of Web 2.0 have included mentions of transparency. Open systems such as blogs allow readers to comment and talk back. Thompson (2008) defined “radical transparency” as it relates to business as the emerging norm for successful practice, including company employees blogging and secrets shared instead of hidden. “Some of this isn't even about business; it's a cultural shift, a redrawing of the lines between what's private and what's public. A generation has grown up blogging, posting a daily phonecam picture on Flickr and listing its geographic position in real time on Dodgeball and Google Maps. For them, authenticity comes from online exposure. It's hard to trust anyone who doesn't list their dreams and fears on Facebook,” he notes.

Casey and Stephens wrote a monthly column entitled “The Transparent Library” in *Library Journal* from 2007-2009, exploring themes such as open communication, tapping into user needs via various communication strategies, progressive library management, public relations in the age of the participatory Web, librarians' egos, barriers and innovative thinking, include numerous mentions of Learning 2.0 as a means to engage staff and open a dialogue (2007). Blowers (2008b) argued that transparency was an important building block of Learning 2.0 success.

“Transparency and radical trust are two of the cornerstones of the whole 2.0 movement, and these elements are no less important to the learning environment. In creating this effort to fully engage and empower the staff, my library had to assume an unprecedented trust in our employees and practice transparency when it came to communicating with them. Allowing staff members to blog openly and anonymously implies a great deal of faith and is not something with which every organization is immediately comfortable. But once you experience the benefits and see how this approach motivates and empowers staff to learn on their own, it's hard to imagine proceeding otherwise.”

Another highlighted component of Learning 2.0 is an emphasis on play, as noted by Blowers (2008b). Jenkins (2006) included play, “the capacity to experiment with one's surroundings as a form of problem-solving,” as one of the emerging social literacies or skills for education. Combining transparency, play and a sense of exploring new spaces is vital in describing what the Learning 2.0 model has become.

Statement of the Problem

Created to include all staff in a learning activity and offered to all via a Creative Commons license, it is easy for practitioners to say that Learning 2.0 programs are a successful way to engage staff. Replicated more than 500 times across the globe in various types of libraries and over 30 times in Australia alone, what is the true impact

of the program on libraries. What does it mean to say that the program “has fundamentally changed the staff’s way of thinking and working in the 21st century” (Titangos & Mason, 2009). How have the tools been adopted? Does the culture of learning continue?

If openness, transparency and trust are part of the building blocks of an emerging vision of libraries, and Blowers urges those offering the program to practice these traits, it follows then that these commonalities should be present as part of the organisational culture of the library. Or do they disappear after the program is done?

This study will evaluate the impact of Learning 2.0 programs and the perceived levels of openness, transparency and trust in organisations that have completed the course.

Research Questions

With world-wide attention, the Learning 2.0 model is touted by anecdotal evidence and major coverage in the professional literature as a means to educate and transform libraries. The following research questions frame this study to measure the impact of the model:

To what extent has Learning 2.0 impacted institutional culture, staff confidence, institutional morale, and institutional openness?

To what extent have Learning 2.0 programs improved library staff’s ability to utilise emerging technologies?

Methodology

The intent of this study is to understand the impact on library staff and institutional culture and makeup after a Learning 2.0 program. The investigation is in three parts, reflecting a multi-format research design.

Part one consisted of a review of the literature and Web sites devoted to Learning 2.0 programs, to develop a checklist of exemplary practices for the learning program at the test sites, as well as a survey of Australian libraries that have completed the program to gauge the effectiveness of some of the program’s components.

A second survey was deployed for Australian program administrators: library staff who were the leaders or project managers of Learning 2.0 programs in their library services. A list of program leaders were identified by internet searches (using keywords such as ‘23 things’ and ‘learning 2.0’) and by the ‘Learning 2.0 throughout the World’ Google Map:

<http://maps.google.com/maps/ms?ie=UTF8&msa=0&ll=10.989018,-107.237132&spn=179.043159,360&z=1&msid=101962518196533878534.000001122a2490d657a64>. These program leaders were invited to take part in the survey through general invitations on Australian library blogs (<http://librariesinteract.info/2009/06/24/23-things-learning-2-0-survey-for-australian-library-staff/>) and library email lists, or by direct email.

Web Surveys

The researchers reviewed various methodology articles to design the survey instrument. Andrews, Nonnecke, and Preece (2003) noted the usefulness of Web-based surveys as opposed to e-mail surveys and offered a detailed look at the methodology they chose in designing a study to measure the participation in online communities. This overview included the design of the entry page, design of questions as shorter sentences for onscreen reading, and choice of survey population.

Dillman, Tortora, and Bowker (1998) detailed criteria for respondent-friendly design of Web surveys, including creating surveys that display in all types of browsers. They also urged researchers to remember the varying skills of respondents who use computers because some may not be accustomed to certain advanced survey features.

Analysis of Survey Data

As of December 2009, survey data and focus group information is being analysed via quantitative and qualitative methods. Quantitative data will include general demographic information about survey respondents and focus group participants. For the qualitative data, the researchers are using basic content analysis to explain and evaluate the impact of Learning 2.0 on libraries.

Holsti (1969) described content analysis as a means to “describe the attributes of messages, without reference to either the intentions of the sender or the effect of the message upon those to whom it is directed” (p.27). Weber (1990) defined content analysis as a research method that “uses a set of procedures to make valid inferences from text” (p. 9). Content analysis provides a way to understand and classify signs according to their “probable cause and effect” as well as their meanings (Krippendorff, 2004, p. 44-45).

Neuendorf (2002) defined four types of content analysis: descriptive, inferential, psychometric and predictive, and argues for an integrative model that combines description and the identification of relationships. This model, he noted, can be integral “to a full understanding of human behaviour and hence essential to social and behavioral science” (p. 53). Mayring (2000) addressed inductive content analysis and the creation of categories from working through the data:

The main idea of the procedure is, to formulate a criterion of definition, derived from theoretical background and research question, which determines the aspects of the textual material taken into account. Following this criterion, the material is worked through and categories are tentative and step by step deduced. Within a feedback loop those categories are revised, eventually reduced to main categories and checked in respect to their reliability. (p. 4)

This multi-faceted study uses the method of descriptive content analysis, which Neuendorf (2002) describes as attractive in “clarity and parsimony” (p. 53). By

describing the shared experiences of participants in Australian library Learning 2.0 courses, the resulting conclusions and insights will enable a broad view of the impact of such programs on staff and institutions alike.

Analysis of Exemplary Practice

Articles noted in the literature review of this proposal and others located in an ongoing literature search will be used to create the prototype Learning 2.0 program for the test sites. For example, synthesising articles and presentations by Helene Blowers (2008a, 2008b) yields a set of exemplary practice.

In a 2008 article for *School Library Journal*, a month after the magazine offered a worldwide version of the program, Blowers noted:

“Unlike the traditional learning approach, which uses an instructor and faceto-face interaction to fuel participation, Learning 2.0 needs continual nurturing to help participants when they encounter difficulties or have trouble grasping a new concept. A word of encouragement posted in a blog comment or an offer to hook them up with a partner is often all that’s needed to make learners more comfortable as they tackle new applications. Once a participant builds a little confidence and makes an online connection or two, they are ready to take off and begin to develop their own personal learning networks that will extend beyond the life of the program.”

Blowers’ article highlighted ten tips for a successful program. These included:

1. Encourage networking and the learning will follow.
2. Allow participants to blog anonymously.
3. Use 1.0 methods to communicate.
4. Encourage group discovery.
5. Design the program for late bloomers.
6. Focus on discovery, not skill building.
7. Reward staff for learning.
8. Online means hands-on, not hands-off.
9. Enable transparency and practice radical trust.
10. Continually encourage staff to play.

Practices such as these examples and others from Web sites, blog posts and survey evidence will be combined to build the prototype program via a blog-based delivery method.

Preliminary Findings

Administrative Survey

Forty-one respondents answered the survey for program administrators. As at December 2009, data analysis is currently ongoing, but already the data set reveals insights and perceptions of those who implemented the program.

For the survey question: "Did your program also include library users or upper management from your institution," 73% of programme administrators responded negatively. Those who offered further exploration - 13 of 29 respondents - noted that although upper management was included, they did not participate fully or did not complete the program. Responses included:

"Upper management began, but never got much past week 4."

"The program was entirely internal for staff. Although the program was encouraged by upper management they did not participate."

"The learning was open to management but they didn't take it up."

For the survey question: "Do you recognize an impact on the organization because of Learning 2.0? If so, describe it," 81% of respondents reported an impact on their institution as a result of Learning 2.0. Of those who answered the question, 29 respondents described their perceived impact. These include four quantitative categories from the descriptive analysis.

- The library is now using web 2.0 tools to varying degrees 30%
- Staff are more comfortable and knowledgeable about the tools 35%
- It's too soon to tell / No perceived impact/difficult to tell / Need a more practical application of the tools to actually see impact. 30%
- The program has allowed some staff to excel with the tools while others have not, creating a perceived divide in the library. 5%

Early impressions and implications of this data point to the perception by program administrators that staff are more comfortable with technologies included in the "23 Things." One respondent noted: "This brought them on board with Web 2.0. It was no longer foreign to them. They understood it in the broadest sense and were able to apply this to school library activities."

Other respondents believe it is just too soon to tell what impact the program will have. One noted: "Participation rates ended up being quite low. Largely this was attributed to the time required to complete the program. Very little direct impact could be measured, however the Library has gone on to explore the use of various online tools (e.g instant messaging, Facebook, twitter, you tube) to delivery or promote services, and the 23 Things program was probably and important part of preparing staff and positioning the Library as innovative and active in the online environment."

The researchers will be utilising the categories for a more thorough analysis of the data set, to assign weights to each of the responses.

National Survey

The national survey had 384 respondents, with a gender breakdown of 86% female and 14% male. Those in the 45-54 age range were the highest number reporting, at 29%, followed by 28% in the 35-44 age range. 18% of respondents identified themselves as working in an academic library setting, with the next highest percentile at 15% for those who identified that they work in a public library setting.

Position	Response	% Response
Reference Librarian (Academic Library)	59	15.4%
Reference Librarian (Public Library)	51	13.3%
Reference (Special Library)	28	7.3%
Library support staff (Customer service, Shelver etc)	50	13.0%
Teacher Librarian	12	3.1%
Library Technician	15	3.9%
IT/Systems/Web Librarian	24	6.3%
Trainer/Instructor	11	2.9%
Department or Branch Manager	34	8.9%
Collections/Acquisitions/Cataloguing Librarian	22	5.7%
Administrator / Manager	29	7.6%
Corporate Librarian	5	1.3%
Children and Youth Services Librarian	7	1.8%
Library Assistant	6	1.6%
Library Consultant	7	1.8%
TAFE	4	1.0%
I do not currently work in a library	7	1.8%
Other	13	3.4%
Total	384	100.0%
Other Included:		
Reading and Writing Coordinator, Aged Disability Librarian, Liaison Librarian, University Hospital, Repository Manager, Info Access Librarian, Clinical Librarian, Local History Librarian		

For the survey question: "What has been the lasting impact on your library after Learning 2.0," 255 of the respondents chose to answer the question - describing their perceived impact. The impact includes the following, with corresponding percentiles:

- Better/Increased awareness of 2.0 Tools/ inclusive feeling for staff 30%
- Increased use of tools in Library 21%
- No impact 20%
- New ways of working/service 18%
- Confidence/Helping Library Users 16%
- Improvements to staff communication 8%
- Increased use of tools in personal life 4%

At 30%, the Increased Awareness response was the most prevalent. One respondent noted: "We are only just completed the program however my perception is that people are more aware of the purpose of these tools and how useful/enjoyable they can be in a personal setting as well as in the library."

More findings from the data set are to be presented at VALA2010.

Conclusion

Further analysis of other open-ended questions and various statistical manipulations of the data set will further inform these findings. It is evident, however, that the lasting impact of participation in a Learning 2.0 programme can lead to more informed staff discussions and problem-solving with tools highlighted in the learning modules. For some, the impact has yet to be seen. This points to a need for more study and carefully planned analysis of the use of emerging tools in the library setting.

References

- Abram, S. (2006). 43 Things I might want to do this year. Information Outlook. Retrieved February 26, 2009 from http://findarticles.com/p/articles/mi_m0FWE/is_2_10/ai_n16133338
- Abram, S. (2008). The 23 Things - Learning 2.0. Stephen's Lighthouse. Retrieved February 28, 2009 from http://stephenslighthouse.sirsiidynix.com/archives/2008/02/the_23_things_1.html
- Andrews, D., Nonnecke, B., & Preece, J. (2003). Electronic survey methodology: A case study in reaching hard to involve Internet users. International Journal of Human-Computer Interaction, 16(2), 185-210.
- Birnbaum, M. (2004). Human research and data collection via the Internet. Annual Review of Psychology, 55, 803-832.
- Blowers, H. (2006). Learning 2.0 PowerPoint presented at Internet Librarian, Monterey, CA.
- Blowers, H. (2008a). Learning 2.0: Lessons Learned from "Play" Retrieved from <http://www.slideshare.net/hblowers/learning-20-lessons-learned-from-play>
- Blowers, H. (2008b). "Ten tips about 23 things." School Library Journal. Retrieved February 14, 2009 from <http://www.schoollibraryjournal.com/article/CA6600689.html>
- Blowers, H. (2009). WJ hosts 23 Things summit. LibraryBytes. Retrieved March 5, 2009 from <http://www.librarybytes.com/2009/02/wj-hosts-23-things-summit.html>
- Buckland, M. (1992). Redesigning library services: A manifesto. Retrieved February 6, 2009, from <http://sunsite.berkeley.edu/Literature/Library/Redesigning/html.html>
- Casey, M. & Stephens, M. (2007). "Introducing the Michaels." Library Journal. Retrieved February 26, 2009 from <http://www.libraryjournal.com/article/CA6429283.htm>
- Casey, M. & Stephens, M. (2008) "Cheers and Jeers." Library Journal. Retrieved February 26, 2008 from <http://www.libraryjournal.com/article/CA6539361.html>
- Dillman, D., Tortora, R., & Bowker, D. (1998). Principles for constructing web surveys. Retrieved June 12, 2006, from <http://www.sesrc.wsu.edu/dillman/papers/websurveyppr.pdf>
- Gross, J. & Leslie, L (2008). "Twenty-three steps to learning Web 2.0 technologies in an academic library." The Electronic Library, 26:6 p790 - 802
- Hanly, B. (2007) Public Library Geeks Take Web 2.0 to the Stacks. Retrieved February 12, 2009 from http://www.wired.com/culture/education/news/2007/03/learning2_0

Hastings, R. (2007). "Journey to Library 2.0." *Library Journal*. Retrieved February 15, 2009 from <http://www.libraryjournal.com/article/CA6431957.html>

Holsti, O.R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.

Hough, Brenda. "Teaching people to be savvy travelers in a technological world." *Computers in Libraries*, May 2006.

Jenkins, H. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Retrieved March 3, 2009 from <http://digitallearning.macfound.org>

Kenney, B. (2008). SLJ's 2.0 Program begins July 21. Retrieved February 14, 2009 from <http://www.schoollibraryjournal.com/blog/850000285/post/1860029586.html>

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Thousand Oaks, CA: Sage.

Krosnick, J. (1999). Survey research. *Annual Review of Psychology*, 50, 537-567.

Larsen, M. (2008). The Social way to learn online: Learning 2.0 @ Multnomah County Library. *OLA Quarterly*, 14(3), 22-35.

"Learning 2.0." Retrieved from January 31, 2009, <http://plcmclearning.blogspot.com/>

Lewis, L. (2008). Library 2.0: taking it to the street. Retrieved February 16, 2009 from http://www.valaconf.org.au/vala2008/papers2008/35_Lewis_Final.pdf

Mackenzie, C. (2007). "Creating our Future Workforce: planning for Library 2.0 and Beyond." PLA 2007 conference proceedings. Retrieved February 26, 2008 from http://www.pla.org.au/Conf2007/papers/Creating_our_Future.pdf

Mayring, P. (2000). *Qualitative content analysis*. Retrieved May 26, 2007 from <http://www.qualitative-research.net/fqs-texte/2-00/2-00mayring-e.pdf>

Maxymuk, J. (2008). "23 Things and more." *The Bottom Line: Managing Library Finances*, Volume 21, Number 2, p. 64-66.

Neuendorf, K.A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.

O'Reilly, T. (2005a). What is web 2.0? Retrieved February 12, 2009, from <http://tim.oreilly.com/news/2005/09/30/what-is-web-20.html>

O'Reilly T. (2005b). Compact definition. Retrieved February 12, 2009, from http://radar.oreilly.com/archives/2005/10/web_20_compact_definition.html

Stephens, M. (2006a) *Web 2.0 & libraries: Best practices for social software*. Library Technology Reports, American Library Association.

Stephens, M. (2006b). "The Promise of Web 2.0." American Libraries, October 2006.

Stephens, M. (2007a). Web 2.0 & libraries: Trends and technologies . Library Technology Reports, American Library Association.

Stephens, M. (2007b). "Web 2.0," Information Tomorrow, edited by Rachel Singer Gordon, 2007. Information Today.

Stephens, M. (2007c). The Blogging librarian: Pragmatic, connected, visible. Retrieved February 19, 2009 from <http://ukwebfocus.wordpress.com/2007/10/01/the-blogging-librarian-pragmatic-connected-and-visible/>

Thompson, C. (2008). The Naked CEO. Wired. Retrieved February 26, 2008 from http://www.wired.com/wired/archive/15.04/wired40_ceo.html

Titangos, H.-L. H. and Mason, G. L. (2009). Learning library 2.0: 23 things @scpl. Library Management, 30(1/2):44-56.

Weber, R. P. (1990). Basic content analysis (2nd ed.). Newbury Park, CA: Sage.