Wiki for Collaborative Use in Academic Libraries: an Annotated Bibliography

Angela D. Rathmel

Emporia State University, School of Library and Information Science

If collaboration is the key, then wiki is the tool to meeting the needs librarians continually face in areas of knowledge management, capturing tacit knowledge, and active collaboration. These are not new issues in the library environment. In fact, libraries' participation in the Online Computer Library Center (OCLC) is an pioneering example of embracing the type of collaboration that the concept of wiki embodies. It is not surprising to find many examples of libraries using wikis to increase the efficiency and collaboration in their work. LibraryWikis (n.d.), a companion wiki to Bejune's (2007) article on the topic, tracks various applications of wikis in libraries. The two most common among these are library to library collaborations and collaborations between library staff (45.7% and 31.4%, respectively). Less than 25% of wikis used in libraries are public wiki collaborations, such as those between library staff and patrons and those between patrons. The technology itself is quite simple, but the concepts are more uncertain. The nature of the organization of information that wiki allows is fundamentally different from the ways library staff have organized information up to this point. This may be a reason that library and patron collaboration (i.e. collaborative subject guides, users adding tags and reviews to library catalog records) is still in its infancy. This essay and annotated bibliography introduces wikis as an information organization tool and shows how academic libraries are using library wikis to improve services at all levels of its organization.

Research for this essay began by exploring the Library and Information Science and Technology Abstracts (LISTA) database since the subject wikis involve libraries and information science as well as a technology. Based on the prevalent use of wikis for internal communication and policy and procedure documentation, Emerald database was also considered for its in

management and organizational focus.   The literature presents wiki use in libraries in variety of contexts from theoretical and analytical to practical and applicable. Narrowing the use of wikis in academic libraries made it difficult to avoid the somewhat tangential debate surrounding content credibility and authorship in one of the best known wiki applications: Wikipedia. It is important, however, to include this on some level as Wikipedia represents the larger issue of how information is being created and stored in fundamentally different ways.

The arguments surrounding Wikipedia are diverse, but primarily rest on whether it is a credible source for scholarly research. Black (2008) and Parry (2008) largely view Wikipedia as a useful tool for scholarly research. Black supports the intention, impact and potential of the Wikipedia model in comparison to the peer review process by saying, "the extraordinary amount of knowledge produced in today's academic environment prevents the traditional peer-review system from operating effectively" (p. 76).   Parry agrees and believes that is important to teach students how the structures for knowledge creation and archiving are changing by allowing them to use Wikipedia and other wiki technology in their research. To gain a broader understanding of the issues surrounding this debate, it is also helpful to see how the term wiki is used by Tapscott & Williams (2006):

> The new art and science of wikinomics is based on four powerful new ideas: openness, peering, sharing, and acting globally. These new principles are replacing some of the old tenets of business…[P]eople and organizations are harnessing these principles to drive innovation in their workplaces, communities, and industries. (p. 20)

These discussions are useful in seeing the impact of wiki on a macro level and how parallels to the academic library can be drawn. As information organizations, libraries are forced to address

these news ways of knowledge creations and the issues involved in organizing and preserving it. Rogers (2007) too takes a broad look at such trends while focusing academic libraries and insists that librarians look "beyond the library to see within the context of what is happening in the academy, in industry , in government, and in society" (p. 368). Based on her conclusion that "library personnel [need to] think very differently and act much more quickly" (p. 375) it seems appropriate to support the use of collaborative tools, such a wiki, to accomplish this.

In other overviews of the issues of wiki use in libraries (Anderson, 2007; Ferguson, 2005; Fichter, 2005) as well as in the more practical applications of wikis in libraries (Bordeaux & Boyd, 2007; Haupt, 2007; Welsch, 2007; hyager, 2006; Withers, 2005) similar debates about privacy, copyright, standardization and other technical issues abound. All cases, however, clearly support the idea that librarians are in the best position to guide and influence these issues as long as they are willing to take part and experiment with these existing and emerging technologies. The more clearly synthesized contributions to this topic are Leuf & Cunningham's (2001) book devoted solely to wiki, Mattison's (2003) in depth and technical research into wiki use in libraries, and Bejune (2007) who may be the only author who provides a suitable context for understanding wikis and a schema for classifying their functions in libraries.

These sources provide many examples and overwhelming evidence that wikis can be used effectively in libraries and other organizations to improve collaboration and make the work people do and the services they provide more efficient. As Bejune (2007) notes however, wikis are still new technologies. As with any new technology, reluctance and issues of trust can be expected. Fichter (2005) and Welsch (2007) both address these issues and promote creating an

safe environment that will support both the technical and conceptual learning curves associated with wiki implementation. Haupt (2007) warns that a lack of motivation, which may be based on issues of trust, would be "a silent killer" of any established wiki. An important and early consideration to have is the formation of support groups consisting primarily of early adopters of wiki-technology. These groups' task is often called wiki gardening are charged with regularly providing content and supporting the contribution of others.   Organizations that implement wikis are advised to assign this gardening role not just to a single person, akin to a webmaster, but to a group of people, which is akin to the model of wiki.

Librarians understand the value that increasing connectivity has on service to patrons. Before computers, this kind of connectivity was nearly impossible and libraries have continued to struggle with making this a reality even in a networked environment. Ultimately libraries are trying to serve their patrons in the best way possible. Continued collaboration between libraries using wikis will further increase experimentation with wikis in many library contexts. The result will be new discoveries of wiki use in libraries.

Currently library staff wikis are primarily used within individual units such serials acquisitions, reference, or information desks. Front lines staff using wikis to improve services to patrons and technical services staff are using wikis to improve their internal processes which ultimately impacts services to patrons. This is just the beginning, a practice session for what is to come. As concepts of wikis and collaborative technologies become more ubiquitous for libraries, the more connected the internal organization of libraries will become. This will result in greater service to patrons. For front line service staff this will mean a greater understanding of

technical aspects of service. For technical staff it means a closer service connection the patron.

The extended use of wikis for the libraries' direct collaborations with patrons -- currently a low

use application of wikis in libraries -- may serve as our future assessment tool in ultimately

determining our success or failures in this endeavor.

Annotated Bibliography

Anderson, P. (2007). 'ALL THAT GLISTERS IS NOT GOLD' -- WEB 2.0 AND THE

LIBRARIAN. *Journal of Librarianship & Information Science, 39*(4), 195-198.

Retrieved April 23, 2008, from Library, Information Science & Technology Abstracts

database.

This editorial discusses the origins and implications of Web 2.0 in libraries. The author

ultimately points out that "librarians are positioned to provide a unique contribution to

the further development of such services" and calls for more peer reviewed research. As

suggested by its title, this article represents the reluctant viewpoint in the broader

discussion of Web 2.0 and Library 2.0. The author's opening statement regarding

librarians' "unique contribution", was a topic this bibliography sought to explore as well.

Anderson's article alone does not give much beyond stating such facts, but it does

provide a starting point and framework for analysis. The authors claim that there is a

lack of peer reviewed work related to the subject of Web 2.0, could be disputed by the

evidence of this bibliography.

Bejune, M. (2007). Wikis in Libraries. *Information Technology & Libraries*, *26*(3), 26-38.

Retrieved April 23, 2008, from Library, Information Science & Technology Abstracts

database.

Among the plethora of analysis and discussions on the topic of wikis, Bejune's article

stands out in its ability to thoroughly articulate what wikis are and how wikis are used in

libraries for collaborative endeavors. Using the theoretical context of computer science

research and technology to support collaborative work (CSCW), the author elucidates for

the reader how best to understand and approach wiki technology in a variety of contexts.

Finally, the author presents a classification scheme for the various wiki uses in libraries.

Building with further detail upon others' attempts to categorize wiki use in libraries, the

author identifies 4 categories of collaboration: 1) among libraries (extra-organizational);

2) among library staff (intra-organizational); 3) among library staff and patrons; and 4)

among patrons. To counter Anderson (2007), this is one example of peer reviewed

literature on the subject of Web 2.0 trends with large impact on the field. This article is

also supplemented by a wiki, LibraryWikis (n.d.).

Black, E. (2007), Wikipedia and academic peer review: Wikipedia as a recognized medium for

scholarly publication? *Online Information Revie, 32*(1), 73-88. Retrieved April 23, 2008

from www.emeraldinsight.com/10.1108/14684520810865994.

Significant discussion has taken place regarding academia and Wikipedia in the literature,

on the web, and in the media. Where Parry (2008) more generally identifies the

academic environment's reluctance to adopt the theoretical model of wiki technology,

Black goes into further detail through a comparative discussion of the academic peer

review authorship model and those that have made wiki and Wikipedia in particular so

popular and effective. It is important to observe the parallels that exist here between the

experience of publishing (authors) and providing access (libraries) in the academic

environment for the fundamental reason that we share the same goal – knowledge

creation and dissemination.

Bordeaux, A., & Boyd, M. (2007). Blogs, wikis, and podcasts: Social software in the library.

Serials Librarian, 52(3/4), 263-269. Retrieved April 15, 2008, from Library, Information

Science & Technology Abstracts database.

The article was included for its focus on wikis in the academic library context. Various

Library 2.0 technologies are explored from the experience of Binghamton University

Libraries, so only a potion of the article is specific to wikis. However, its strength lies in

outlining the areas in which wikis are superior to other technologies for the specific

purpose of library collaboration.

Ferguson, C. (2005, November). Technology left Behind -- The Wide World of Wikis. *Against*

the Grain, *17*(5), 83-84. Retrieved April 23, 2008, from Library, Information Science &

Technology Abstracts database.

Like Anderson (2008) this author only briefly overviews the subject of wiki use in

libraries and academia. However, this article provides actual examples of "Wikis at work

in the Library" among them specifically are examples of library staff collaboration wikis

that other articles do not include. The introduction of terms *Wiki vandalism* and *Wiki*

spam also touches on the concerns surrounding the use of Wikipedia and wiki technology

in scholarly endeavors. It should be noted that this is a very brief and superficial

overview which does not elaborate on solutions to the problems it presents. See Black

(2007) for a more in depth theoretical discussion of this topic.

Fichter, D. (2005). Intranets, Wikis, Blikis, and Collaborative Working. *Online, 29*(5), 47-50. Retrieved April 8, 2008 from Library, Information Science & Technology Abstracts.

The opening sentence of this article states its relevance succinctly, "The new mantra for organizations is collaboration" (p 47) and identifies the implications wikis have on internal collaboration in particular.   Like many of the other articles Fichter tries to pack everything from the overall benefits (ease of use, quickness) of wiki, to the how-to of updating and navigating the technology, to considerations for implementing a wiki for your organization.   Particularly relevant is her reference to term *wiki gardeners* and the cultural considerations within a organization that will make a wiki both useful and continually effective.

Haupt, J. (2007). From zero to wiki: Proposing and implementing a library wiki. *Journal of web librarianship, 1*(1), 77-92.

Like Bordeaux and Boyd (2007), this article examines the use of wikis in a specific academic library. Haupt goes further to explain the complete process of implementing a wiki at the Iowa State University Library.   Keywords for this article include: wiki, intranets, academic libraries, PmWiki, and library webpages, indicating the intent the author states in the introduction that the "article is to help individuals or groups feel more comfortable about beginning a new wiki project, be it a smaller individual project, an internal library wiki, or a major public website" (p. 78).   The author focuses largely on positing wikis against traditional website management and web authoring, citing the ease and quickness of wiki technology in this area where web authorship often presents a bottleneck. More than just the practical applications of the wiki, other interesting and

thorough points presented were personnel implications, as well as useful comments regarding continuing evaluation of wiki projects.

hyager. (2006, September 22). Re: Week 3: Wikis Message posted to Five weeks to a social library: http://www.sociallibraries.com/course/week3 .

This is a blog devoted to the free online professional development course, "Five Weeks to a Social Library" aimed at teaching librarians about social software. Week 3 is devoted to Wiki. It provides a few podcasts and screencasts of both general and specific wikis uses in libraries. The blog's layout is somewhat disorganized , but the podcasts offers a unique mode of learning. The information is useful as its stated purpose indicates, providing ideas and support for wiki use in various aspects of the library profession. Meredith Farkas (creator of the official 2006 ALA Conference wiki and whose Library Success wiki is cited in this blog) and Chad Boeninger (author of a podcast included in this blog) were both names that came up frequently in the research of wiki use in libraries.

Leuf, B., & Cunningham, W. (2001). *The wiki way: quick collaboration on the Web.* Boston: Addison-Wesley.

Ward Cunningham is credited with launching the first wiki, WikiWikiWeb and is co-author of this general reference book covering many aspects of wiki and collaborative work tools. Of particular interest was Chapter 1 which introduced the origins of wiki specifically and collaborative technologies in general. Part III: Imagine the possibilities explores interesting case studies of academic and vocational use of wiki technologies.

There are also chapters related to implementation, installation, and administration of wiki.

LibraryWikis. (n.d.) Retrieved May 3, 2008 from Library Wikis: http://librarywikis.pbwiki.com/

Bejune's (2007) article is supplemented by this wiki compiling data and references to library wikis. The added value this wiki provides to the already valuable information in Bejune's article is an opportunity and invitation to collaborate to the topic. The content is allowed to develop beyond the research presented it the article alone.

Mattison, D. (2003). Quickiwiki, Swiki, Twiki, Zwiki and the Plone Wars. *Searcher, 11*(4), 32-48. Retrieved April 15, 2008, from Academic Search Premier database.

Citing heavily from Leuf & Cunningham (2001) and frequently cited by Withers (2005), this author has produced a thorough and well researched overview of wikis from a technical point of view. It is readable and includes theoretical overviews as well as content on implementing a wiki, comparisons to other collaborative technologies, and the history and future of online knowledge creation in general. The author makes clear distinctions between traditional wikis and their more "feature-rich" evolution into wiki collaboration management systems (WCMS). Other authors in this bibliography who promote the use of wiki in libraries, are likely referring to WCMS for the must-have RSS capabilities or other alert mechanisms as well as the potential to incorporate images, video and audio. Unique among the discussion of drawbacks to wiki technology, Mattison points out the potential problems with lack of standardization across the open source wiki models (potentially improved by database server versions). This parallels the problem of a lack of standardization among searching web engines and databases, as well

as concerns regarding digital preservation. Librarians who are already grappling with these similar issues should be well prepared to tackle these challenges in the wiki context. As other authors have stated, there is an opportunity for librarians to shape the directions of this technology and the potential it presents for information organization and preservation.

Parry, D. (2008, February 11). Re: Wikipedia and the new curriculum: Digital literacy is knowing how we store what we know. Message posted to *Science Progress:* http://www.scienceprogress.org/2008/02/wikipedia-and-the-new-curriculum/:

The focus of this blog entry is like many others a discussion of the tenuous relationship of Wikipedia and academia. Parry begins with his support of using Wikipedia by controversially claiming "it is irresponsible to for educational institution to not teach [this] new technology". The remainder of the blog article speaks more broadly of the phenomenon that shapes Wikipedia and how we are called to respond to these new systems of knowledge. The uniqueness of a blog entry -- and of this blog to the topic of wiki use -- is the ability to create a discussion as part of the whole article via comments to the individual blog post. The discussion that follows in the comments focuses largely on Wikipedia, when Parry very clearly makes the main focus extend more broadly to digital literacy and knowledge creation and preservation. In this article Parry is promoting the wiki concept through the example of Wikipedia. Despite this seemingly never-ending Wikipedia v. Academia debate, it actually serves to make a case for other less controversial applications of wikis in academia as other authors in the literature articulate.

Rogers, S. (2007). Assessing trends to cultivate new thinking in academic libraries. *Library Management, 28*(6/7), 366-378. Retrieved April 23, 2008 from http://www.emeraldinsight.com/10.1108/01435120710774503

This article very clearly summarizes both the and the challenges libraries face in the midst of rapid change. Especially significant is the challenge in responding to the abundance of information surrounding these trends and how that impacts the ability to actually make decisions. While focusing largely on change management and information management in academic libraries, the article does address specific trends, primarily in the ways users expect to access resources. Rogers offers a thorough summary and realistic solutions. A large take-away from the article is the statement that "libraries cannot succeed by working in isolation" (p.375).   In other words and stated by sundry authors: collaboration is key. While these trends still may feel revolutionary due to the speed of change and the steepness of the learning curve, it is more likely somewhat evolutionary and librarians are already seeing that bear out.

Tapscott, D. and Williams, A. (2006). *Wikinomics: how mass collaboration changes everything.* New York: Portfolio.

Focused in the corporate environment, this book gathers research in the areas of social networking phenomena and evaluates its impact on ownership and profit. Terming the word wikinomics as a "metaphor for a new era of collaboration and participation" (p. 18), the subject of wiki is taken very broadly. As foreign as the corporate world might seem compared to the mission of libraries, Rogers (2007) supports the view that academia and libraries would benefit from the lessons learned in the corporate industry and society at large.

Welsh, A. (2007). Internal wikis for procedures and training: from tacit knowledge to self guided learning. *Online, 31*(6), 26-29.

Welsh is a corporate information officer and presents her own organization's experience as well as other examples of internal staff use of wiki for procedures and training. The relevance to libraries is proven in the exploration of the impact of wiki use for tacit knowledge management and staff development. In her comments regarding issues of privacy and confidentiality, she further explores the relationship these ideas have in the learning environment, particularly to learning a new technology and the general issues of trust in a learning environment. She also points out the benefit of wikis to blend the modes of informal and formal communication for the purpose of meeting both the needs of users and of the organization.

Withers, R. (2005). Something wiki this way comes. *College & Research Libraries News, 66*(11), 775-777. Retrieved April 15, 2008, from Library, Information Science & Technology Abstracts database.

Unique for the time, this article introduces the use of wikis in staff contexts in the library. Withers attempts to rebut the view of one librarian who found wiki to be uninteresting and problematic by outlining how a wiki would be an important tool for the collaborative work already being done by library staff in the information desk and reference contexts. The weakness of this article and the literature in general is this limited contextual view of the use of wikis among library staff. For example, rapidly changing problems that a wiki might help solve such as networking, broken urls and network outages citied by this

article are not issues that only affect front line user services staff and patrons, but a variety of technical services staff and administration.