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# USER-GENERATED TAGGING AND THE PUBLIC LIBRARY ONLINE PUBLIC ACCESS CATALOG

by Andrea C. McDonald

# A Thesis

Submitted in partial fulfillment of the requirements of the Master of Arts Degree of
The Graduate School at
Rowan University
May 15, 2008

Approved	by			
		Profess	or	

Date Approved May 15, 2008

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#### **ABSTRACT**

# Andrea C. McDonald USER-GENERATED TAGGING AND THE ONLINE PUBLIC ACCESS CATALOG 2007/2008 Dr. Marilyn Shontz Master of Arts in Public Librarianship

The purpose of this study was to survey southern New Jersey public librarians' attitudes towards the feasibility of including user-generated tagging in the public library online public access catalog (OPAC). The research questions of the thesis concerned the advantages and disadvantages of user-generated tagging, the co-existence of user-generated tagging and controlled subject headings, the future of user-generated tagging, and what the librarians thought about user-generated tagging in the OPAC.

The methodology of the study was applied research. Nineteen southern New Jersey public librarians completed an attitudinal survey on user-generated tagging.

Responses were tallied and placed into a spreadsheet and graphic representations for analysis.

A finding of the study was that "good-enough," in reference to user-generated tagging, was not acceptable to the majority of the southern New Jersey public librarians.

None of the librarians had user-generated tagging in their OPACs, and a significant finding of the thesis was that a majority of the librarians chose advantage in response to the survey statement user-generated tagging and controlled subject headings can co-exist.

# **ACKNOWLEDGEMENTS**

I would like to acknowledge Dr. Marilyn Shontz for her patience and excellent instruction, my sons, Fritz and Andrew McDonald, for their example of perseverance in the pursuit of their dreams, and my friend, William Vandegrift, for his encouragement and support.

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#### CHAPTER I

#### STATEMENT OF THE PROBLEM

## Significance of the Topic

This thesis investigated the concept of user-generated tagging in the online public access catalogs (OPACs) of public libraries in southern New Jersey. User-generated tagging is a new phenomenon which is included under the broader term of folksonomy.

User-generated tagging in the OPACs of public libraries is possible through the use of Web 2.0 applications, which allow for "metadata created by users" (West, 2007, p. 58). User-generated tagging within these applications would involve a "partnership" between librarians and patrons (Sheehan, 2007, p. 3) and more direct patron involvement.

Traditionally, subject headings in OPACs have been assigned by an authority, one example given being a librarian (Rowley as cited in Spiteri, 2006). Folksonomies represent a more democratic approach where everyone can contribute user-generated tagging (Kroski as cited in Spiteri, 2007).

User-generated tagging in the public library OPAC is a novel idea. There has been a sparse amount of study on the topic (Spiteri, 2006). There is little information on how librarians in public libraries perceive the topic of user-generated tagging. Spalding (as cited in Rethlefsen, 2007, January) stated that public libraries are afraid of user-generated tagging and based his opinion on his experiences in the promotion of his product *LibraryThing*.

# Purpose of the Proposed Study

User-generated tagging in the public library OPAC is a concept that is not in the far distant future but is taking place in the present day (Sheehan, 2007; Rethlefsen, 2007, September; Wyatt, 2007). The purpose of this study was to survey southern New Jersey public librarians' attitudes towards the feasibility of including user-generated tagging in the public library OPAC.

Research questions for this study on user-generated tagging in the public library OPAC included:

- How did southern New Jersey public librarians rate the advantages of usergenerated tagging?
- How did southern New Jersey public librarians rate the disadvantages of usergenerated tagging?
- Did southern New Jersey public librarians agree that user-generated tagging and controlled subject headings could co-exist?
- According to southern New Jersey public librarians, what was the future of usergenerated tagging?
- What did southern New Jersey public librarians think about user-generated tagging in the OPAC?

# **Definition of Terms**

Abbreviation: "A shortened form of a written word or phrase used in place of the whole" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 2).

Acronym: "A word formed from the initial letter or letters of each of the successive parts or major parts of a compound term" (Merriam-Webster's Collegiate

*Dictionary*, 2005, p. 12). For purposes of this study acronym and initialism will be used interchangeably.

Authority: "The knowledge and experience that qualifies a person to write or speak as an expert on a given subject" (Reitz, 2004-6). For purposes of this study authority and an expert with knowledge and experience in assigning subject headings will be used interchangeably.

Binary: "Compounded or consisting of or marked by two things or parts" (Merriam-Webster's Collegiate Dictionary, 2005, p. 122).

Classification: "The placing of subjects into categories; in organization of information, classification is the process of determining where an information package fits into a given hierarchy" (Taylor, 2004, p. 359).

Controlled vocabulary: "A list or database of subject terms in which all terms or phrases representing a concept are brought together" (Taylor, 2004, p. 361).

Count nouns: "Names of objects or concepts that are subject to the question 'How many?' but not 'How much?' These should normally be expressed as plurals" (National Information Standards Organization, 2005, p. 28).

Del.icio.us: Functions as a bookmarking site (Spiteri, 2007).

Desire lines: "The footworn paths that sometime appear in a landscape over time" (Merholz as cited in Spiteri, 2006, p. 79).

Digital: "Characterized by electronic and especially computerized technology" (Merriam-Webster's Collegiate Dictionary, 2005, p. 349).

Folksonomy: "[T]he result of personal free tagging of information and objects (anything with a URL) for one's own retrieval. The tagging is done in a social

environment (shared and open to others). The act of tagging is done by the person consuming the information" (Vander Wal as cited in West, 2007, p.58).

*Furl*: Functions as a bookmarking site (Spiteri, 2007).

Hierarchical classification: "A subject concept arrangement that follows the classical theory of categorization, creating categories from general to specific" (Taylor, 2004, p. 366).

Hierarchy: "An arrangement by which categories are grouped in such a way that a concept (e.g., class or discipline) is subdivided into subconcepts of an equal level of specificity, each of those subconcepts are further subdivided into subcategories, and so on" (Taylor, 2004, p. 366).

Homograph: "One of two or more words spelled alike but different in meaning or derivation or pronunciation" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 595).

Indexing: "The process of creating surrogate records, especially the access points, for information packages...in nonprofit agencies is usually called cataloging" (Taylor, 2004, p. 368).

Indexing language: "A rule-based means for choosing and structuring terms, either controlled or noncontrolled, that can assist in providing access to an information package" (Taylor, 2004, p. 368).

Internet: A global network comprised of thousands of interconnected computer networks; it allows access to such services as electronic mail, remote login, file transfer services, and the World Wide Web" (Taylor, 2004, p. 368).

Jargon: "Confused unintelligible language" (Merriam-Webster's Collegiate Dictionary, 2005, p. 670).

Keyword: "A significant word or phrase in the title, subject headings (descriptors), contents note, abstract, or text of a record in an online catalog...that can be used as a search term... to retrieve all the records containing it" (Reitz, 2004-6).

Librarian: "A professionally trained person responsible for the care of a library and its contents, including the selection, processing, and organization of materials and the delivery of information, instruction, and loan services to meet the needs of its users. In the online environment, the role of the librarian is to manage and mediate access to information that may exist in only electronic form" (Reitz, 2004-6). For purposes of this study librarian, public librarian, and Library and Information Science (LIS) professional will be used interchangeably.

LibraryThing: "Member users can create a sophisticated catalog of their personal book collections, view the collections of others, learn about worthy titles, and connect with like-minded readers" (Ishizuka, 2006, para. 1).

Library 2.0: "Involves the use of interactive, collaborative and multimedia Webbased technologies with these four essential characteristics": user centered, multimedia enabled, socially rich, and communally innovative (Maness, 2006, p. 140).

Long tail: "Refer[s] to the large number of specialized offerings that in themselves appeal to a small number of people, but cumulatively represent a large market that can be easily aggregated on the Internet..." (Hansell as cited in Gordon-Murnane, 2006, p. 28).

Metadata: "An encoded description of an information package; the purpose of metadata is to provide a level of data at which choices can be made as to which

information packages one wishes to view or search, without having to search massive amounts of irrelevant full text" (Taylor, 2004, p. 371).

Neologism: "A new word, usage, or expression" (Merriam-Webster's Collegiate Dictionary, 2005, p. 831).

Non-count nouns: "Mass (non-count) nouns are names of materials or substances that are subject to the question 'How much?' but not 'How many?' These should be expressed in the singular" (National Information Standards Organization, 2005, p.29).

Online: "Connected to, served by, or available through a system and especially a computer or telecommunications system (as the Internet)" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 867).

OPAC: "An acronym for online public access catalog, a database composed of bibliographic records describing the books and other materials owned by a library or library system, accessible via public terminals or workstations usually concentrated near the reference desk to make it easy for users to request the assistance of a trained reference librarian" (Reitz, 2004-6). For purposes of this study OPAC, catalog, and catalogue will be used interchangeably.

Patron: "Any person who uses the resources and services of a library, not necessarily a registered borrower" (Reitz, 2004-6). For purposes of this study a patron will be over the age of thirteen, and patron and client will be used interchangeably.

Public library: "An entity that is established under state enabling laws or regulations to serve a community, district, or region, and that provides at least the following: 1) an organized collection of printed or other library materials, or a combination thereof; 2) paid staff; 3) an established schedule in which services of the

staff are available to the public; 4) the facilities necessary to support such a collection, staff, and schedule; and 5) is supported in whole or in part with public funds" (FSCS as cited in de la Pēna McCook, 2004, p. 2-3).

Scalable: "Capable of being easily expanded or upgraded on demand" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 1106).

Slang: "Language peculiar to a particular group" (Merriam-Webster's Collegiate Dictionary, 2005, p. 1170).

Southern New Jersey: Includes Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties as defined by the researcher.

Spam: "Unsolicited usually commercial e-mail sent to a large number of addresses" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 1195).

Subject heading: "The most specific word or phrase that describes the subject, or one of the subjects, of a work, selected from a list of preferred terms (controlled vocabulary) and assigned as an added entry in the bibliographic record to serve as an access point in the library catalog" (Reitz, 2004-6).

Synonym: "One of two or more words or expressions of the same language that have the same or nearly the same meaning in some or all senses" (*Merriam-Webster's Collegiate Dictionary*, 2005, p. 1268).

Tag cloud: "A complete or partial listing of the tags...used with indicators such as word order, text size, or color to show the popularity or frequency of that tag" (West, 2007, p. 59).

Taxonomy: "A classification, usually in a restricted subject field, that is arranged to show presumed natural relationships" (Taylor, 2004, p. 380).

*Technarati:* "Enables people to search for, and organize, blogs" (Spiteri, 2007, para. 10).

Thesaurus: "A list of authorized controlled vocabulary terms representing single concepts together with any references, scope notes, and subdivisions associated with each term, and organized so that the relationships between concepts are made explicit" (Taylor, 2004, p. 380).

Unique entities: "May represent the names of people, places, organizations, products, and specific events" (NISO 2005 as cited in Spiteri, 2007, para.15).

User-generated tagging: A form of indexing controlled by users (Ojala, 2007). For purposes of this study user-generated tagging and user-based tagging, user-generated data, user-contributed data, user-derived vocabulary, collaborative tagging, tagging, tag, and social bookmarking will be used interchangeably. For purposes of this study users will be over the age of thirteen.

Web 2.0: "A way to capture the next phase of development for the Web in terms of Web architecture, the development of the software applications, and new business models for the Web" (O'Reilly as cited in Gordon-Murnane, 2006, p. 29).

WWW (World Wide Web): "A nonlinear, multimedia, flexible system to provide information resources on the Internet and to gain access to such resources" (Taylor, 2004, p. 383). Also known as the Web (Taylor, 2004).

#### **Assumptions and Limitations**

An assumption of the study on user-generated tagging in the public library OPAC was that the librarians surveyed were truthful in their responses to the survey questions. It was assumed that the librarians had observed a sample of user-generated tagging in the

Ann Arbor District Library (AADL) OPAC or another library site and, therefore, had a general knowledge of the concept. It was assumed that the subjects responding to the survey were librarians.

Respondents to the survey were limited to librarians who are employed by public libraries in southern New Jersey.

#### References

- de la Pena McCook, K. (2004). *Introduction to public librarianship*. New York: Neal-Schuman Publishers, Inc.
- Dye, J. (2006, April). Folksonomy: A game of high-tech (and high-stakes) tag. *E- Content*, 29, 38-43. Retrieved September 23, 2007, from Wilson
  Library Literature & Information Science.
- Fichter, D. (2006, May/June). Intranet applications for tagging and folksonomies. Online (Weston, CT), 30, 43-5. Retrieved October 8, 2007, from EBSCOhost Academic Search Premier.
- Gordon-Murnane, L. (2006, June). Social bookmarking, folksonomies, and Web 2.0 tools. *Searcher*, *14*, 26-38. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Ishizuka, K. (2006, October). A book lover's MySpace. *School Library Journal*, 52, 24-5. Retrieved September 23, 2007, from Wilson Library Literature and Information Science.
- Maness, J. M. (2006). Library 2.0: The next generation of Web-based library services. *Logos*, 17, 139-45. Retrieved November 11, 2007, from Wilson Library Literature & Information Science.
- Merriam-Webster's Collegiate Dictionary (11th ed.). (2005). Springfield, MA: Merriam-Webster, Incorporated.
- National Information Standards Organization. (2005, July 25). Guidelines for the construction, format, and management of monolingual controlled vocabularies. Bethesda, MD: NISO Press. Retrieved on November 23, 2007, from http://www.niso.org/standards/resources/Z39-19-2005.pdf
- Ojala, M. (2007, May/June). Web 2.0 and value-added indexing. *Online* (Weston, CT), 31, 5. Retrieved October 8, 2007 from Wilson Library Literature & Information Science.
- Peterson, E. (2006, November). Beneath the metadata: Some philosophical problems with folksonomy. *D-Lib Magazine*, 12. Retrieved September 23, 2007, from http://www.dlib.org/dlib/november06/peterson/11peterson.html
- Reitz, J. M. (2004-6). *ODLIS-Online dictionary for library and information science*. Retrieved October 14, 2007, from http://lu.com/odlis

- Rethlefsen, M. L. (2007, January). Chief Thingamabrarian. *Library Journal*, 132, 40-42. Retrieved October 14, 2007, from Wilson Library Literature and Information Science.
- Rethlefsen, M. L. (2007, September 15). Tags help make libraries Del.icio.us: Social bookmarking and tagging boost participation. *Library Journal*, 132, 26-28.
- Sheehan, K. (2007, Summer). LibraryThing for Libraries. *Library Journal*, 132(NetConnect Suppl.), 3.
- Spiteri, L. F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, 51, 75-89.
- Spiteri, L. F. (2007, June). Structure and form of folksonomy tags: The road to the public library catalogue. *Webology*, *4*. Retrieved September 23, 2007 from, http://www.webology.ir/2007/v4n2/a41.html
- Taylor, A. G. (2004). *The organization of information* (2nd ed.). Westport, CT: Libraries Unlimited.
- West, J. (2007, April/May). Subject headings 2.0: Folksonomies and tags. *Library Media Connection*, 25, 58-9. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Wyatt, N. (2007, November 1). 2.0 for readers: Online innovations reinvent how we use a classic RA tool--annotations. *Library Journal*, 132, 30-33.

#### **CHAPTER II**

#### REVIEW OF THE LITERATURE

#### Introduction

User-generated tagging is a new phenomenon brought about by the introduction of Web 2.0 (Kroski, 2007), and is included under the broader term of folksonomy. User-generated tagging in the OPACs of public libraries is possible through the use of Web 2.0 applications, which allow for metadata created by users (West, 2007). User-generated tagging within these applications would involve a "partnership" between librarians and patrons (Sheehan, 2007, p.3) and more direct patron involvement. By giving access and control to the patrons in the public library OPAC, user-generated tagging also falls under the newer heading of Library 2.0 (Maness, 2006).

#### Advantages of User-Generated Tagging

Kroski (2005; 2007) summarized the advantages of user-generated tagging and folksonomies. User-generated tagging and folksonomies:

- Are inclusive of everyone's vocabulary and reflective of everyone's needs
   without cultural, social, or political bias and offer the opportunity to discover
   "long tail" minority interests.
- Are fluid and current because they are created quickly and added immediately.
- Facilitate the discovery of unknown and unexpected resources.
- Are non-binary where items can fit into multiple categories.

- Are democratic because everyone can add something and self-moderating because they are public with the most popular terms being the most relevant.
- Follow "desire lines" reflecting the direct information needs and desires of the user.
- Offer insight into user behavior by observing how others tag their resources and the untraditional categories that emerge.
- Promote sharing and community.
- Offer a low-cost alternative to a traditional, hierarchical taxonomy with a controlled vocabulary created by experts for Web resources.
- Offer a usable by all bottom-up rather than top-down approach, which would require training and skill.
- With the enormity of information published online, offer a more scalable approach (para.11-24; pp.94-8).

Some additional findings on the advantages of user-generated tagging were included in the following studies.

West (2007) commented that "tags are a good tool for adding quick and dirty metadata to digital content...to increase findability of digital content...and are often a supplement to other traditional means of accessing information" (p. 59).

Probably because of the social aspect people enjoy, are willing to, and, with feedback, are encouraged to contribute user-generated tagging (Fichter, 2006). User-generated tagging and folksonomies take away the anxiety of having to pick the exact term (Sinha as cited in Fichter, 2006; Macgregor & McCulloch, 2006).

Golder and Huberman (2006) stated that user-generated tagging has both a public and private aspect. Tags can be contributed and viewed by anyone. The authors commented that user-generated tagging is "most useful when there is nobody in the 'librarian role'" (p. 198) or there is too much content.

Weinberger (2005) felt that along with a social aspect, user-generated tagging clarifies, not what an object is about, but what it means to others. Users are not going to wait for an authority. User-generated tagging may be "messy, inelegant, and inefficient" but will be "good enough" reflecting users needs and way of thinking (para. 6).

The specific value of user-generated tagging and folksonomies in the public library catalog is "to organize personal information spaces, supplement existing controlled vocabularies, and create online communities of interest" (Spiteri, 2006, p.75).

# Disadvantages of User Generated Tagging

Kroski (2005; 2007) also summarized the disadvantages of user-generated tagging and folksonomies but added, for every negative, there are supporters who will find an advantage. User-generated tagging and folksonomies:

- Have no synonym control and therefore no way to regulate the use of singles versus plurals and acronyms.
- Lack precision.
- Are flat systems and lack hierarchy.
- Do not utilize broader or narrower terms and therefore have a "basic level" problem with different choices by users for the same entity.
- Because of the lack of synonym control, have a lack of system recall in the return of all related items.

• Have the potential for gaming, which is similar to spamming, and the unethical corruption of a system (para. 26-36; pp. 98-9).

Additional thoughts and research on the disadvantages of user-generated tagging and folksonomies follow.

Spiteri (2007) found problem areas with user-generated tagging and folksonomies in the use of the singular and plural form of count nouns, ambiguous tags in the form of homographs, and unqualified abbreviations or acronyms.

Guy and Tonkin (as cited in Gordon-Murnane, 2006) concluded that user-generated tagging and folksonomies are "imprecise, ambiguous, overly personal, and inexact" (p. 30). Gordon-Murnane (2006) added that, in some applications, single-word tagging can create problems with trying to "reach more complex concepts and ideas" (p. 30).

Noruzi (2007) added the possibility of problems with user-generated tagging and folksonomies and foreign languages because of the use of different words and vocabularies.

Bates (2006) noted that a weakness of user-generated tagging is that "it's done by people who aren't thinking like catalogers" (p. 64). They are thinking of how the term relates to the present and not of how relevant it will be in the future.

Can User-Generated Tagging and Controlled Subject Headings Coexist?

Gordon-Murnane (2006) concluded that some believe that user-generated tagging and folksonomies will make searching on the Web easier and replace traditional taxonomies. Others do not believe that user-generated tagging and folksonomies can or should replace taxonomy systems (Gordon-Murnane, 2006).

Combining user-generated tagging and folksonomies and taxonomies might improve "findability" and "bridge the gap" between user's and controlled vocabulary terms in OPACs (Fichter, 2006, p. 45).

Crawford (as cited in Gordon-Murname, 2006) "concluded that user-generated tags and formal classification systems are not an either/or proposition" and that "more interesting questions are how tagging can be used effectively, and how tagging and formal systems can best complement one another" (pp. 30-1).

# The Future of User-Generated Tagging

Spiteri (2006) suggested areas for future research in the study of user-generated tagging and folksonomies. These areas for research include the balancing of controlled vocabularies with user-generated tagging, quantitative studies on the strengths and weaknesses of user-generated tagging and folksonomies, and the study of the cognitive and behavioral aspects of user-generated tagging and folksonomy use. Once these research projects have been concluded, Spiteri recommended a pilot program to study the use of user-generated tagging and folksonomies in the public library OPAC.

Spiteri (2007), mentioned earlier in this review, conducted research on user-generated tagging and folksonomies in the public library OPAC. Spiteri told that "folksonomies have the potential to add much value to public library catalogues by enabling clients to: store, maintain, and organize items of interest in the catalogue using their own tags" (para.1). In the research study, Spiteri examined how folksonomies are structured and used to find the extent to which they fill user needs not covered by existing subject heading lists. The purpose of the Spiteri study was "to evaluate the structure and form of folksonomies against section 6 of the 2005 NISO guidelines for the construction

of controlled vocabularies, which looks specifically at the choice and form of terms" (para. 4). User-generated tagging was acquired from the bookmarking sites *Del.icio.us* and *Furl* and from *Technorati*, which enables blog searching and organizing.

Homographs, single word vs. multiword terms, types of concepts, unique entities, grammatical forms, nouns (plural and singular), spelling, abbreviations, initialisms, acronyms, neologisms, slang, and jargon were studied. Results of the research were that user-generated tagging corresponds with the National Information Standards

Organization (NISO) guidelines in the areas of concepts expressed, predominance of single tags and nouns, spelling, and use of primarily alphabetic characters. Areas where user-generated tagging did not correspond were in the use of the singular and plural form of count nouns, ambiguous tags in the form of homographs, and unqualified abbreviations or acronyms. A significant proportion of the user-generated tagging that represents count nouns was incorrect in the singular form, which can affect search engine retrieval. There were site specific inconsistencies.

Spiteri (2007) concluded from her research that public libraries that include usergenerated tagging and folksonomies in their catalogs should provide guidelines
concerning the choice and form of user-generated tagging including the difference
between count and non-count nouns, the effects of singular and plural forms on retrieval,
and a standard method to construct multiterm user-generated tagging. Spiteri
recommended links to online dictionaries for assistance with the meaning of terms,
homographs, and abbreviations. An explanation of how ambiguous user-generated
tagging and homographs affect retrieval was promoted as being helpful. With the
addition of guidelines, dictionaries, and links to external reference resources, Spiteri

concluded that user-generated tagging and folksonomies can be an asset to the public library OPAC. This is due to the increase in user friendliness and interactivity in the OPAC.

Noruzi (2007) noted that, although everyone may not agree that a controlled vocabulary or thesaurus is necessary with user-generated tagging and the use of folksonomies, there is a lack of consistency over time or among users without a thesaurus.

Shirky (as cited in Macgregor & McCulloch, 2006) believed that the ambiguities of user-generated tagging should remain. Shirky stated that by keeping similar or related concepts together, terms lose their distinct meanings and are misunderstood. Quintarelli (as cited in Macgregor & McCulloch, 2006) dismissed the importance of a lack of precision in user-generated tagging.

Dye (2006) commented that user-generated tagging is in its infancy and it has not yet been determined if it is "more than just a fad". She believed that the answer to this question will be decided by how user-generated tagging and folksonomies develop, how they are adapted to, and how well the public is served (para. 38).

Fichter (2006) believed that user-generated tagging can prove beneficial for any items without metadata. The item could include photos, music, videos, schematics, diagrams, slides, charts, graphs, and anything without words. Fichter gave local history photographs as an example of a collection which would benefit from user-generated tagging in a public library (p. 44).

Peterson (2006) asked, in reference to user-generated tagging and folksonomies, "Does everything on the Internet have to be cataloged?" Peterson commented that many Internet items can be "eliminated, ignored, and allowed to die off" (para. 18).

What Librarians Think About User-Generated Tagging

Librarians might feel "left behind" or "out of the loop" where the topic of usergenerated tagging is concerned (Abbas & Graham, 2006, para. 1).

Because of perceived problems with user-generated tagging, the concept has been largely ignored by librarians. Librarians should be conducting scholarly research on the value of user-generated tagging and become involved in the development of systems that incorporate the concept (Macgregor & McCullouch, 2006).

Tim Spalding (as cited in Rethlefsen, 2007, January) stated that public libraries are afraid of user-generated-tagging. Spalding based the opinion on his experiences with the promotion of his product, *LibraryThing*.

Spiteri (2006) commented that there has been a sparse amount of study on the topic of user-generated tagging by librarians because the "seemingly uncontrolled nature of folksonomies may appear daunting to a field that emphasizes control and authority in the indexing of objects" (p. 84). Spiteri then added that librarians, on the other hand, with their knowledge of indexing and indexing languages, are most qualified to conduct research on user-generated tagging and folksonomies.

Even without an abundance of scholarly research, a few public libraries are moving forward with the utilization of user-generated tagging in their OPACs. These public libraries include Michigan's Ann Arbor District Library (AADL) (Rethlefsen, 2007, September; Wyatt, 2007) and Connecticut's Danbury Public Library (Sheehan,

2007; Rethlefsen, 2007, September; Wyatt, 2007). Library system vendors such as *Innovative Interfaces Encore* are introducing products which enable user-generated tagging in the library OPAC (Rethlefsen, 2007, September; Wyatt, 2007).

#### Summary

Some librarians and public libraries are moving ahead, without the benefit of an abundance of scholarly research, and introducing the concept of user-generated tagging in their OPACs. With an increase in scholarly research on user-generated tagging, librarians will be able to make informed decisions regarding the introduction of the concept to their patrons.

There are opinions on both sides on the feasibility of user-generated tagging.

Some librarians in public libraries are adopting user-generated tagging, while others are left out. Do southern New Jersey public librarians have enough knowledge to make informed decisions on the concept? What are southern New Jersey public librarian's attitudes towards the feasibility of user-generated tagging in the public library OPAC?

#### References

- Abbas, J., & Graham, J. (2006). So, let's talk about tagging, user-defined/supplied descriptors...A research and curricular agenda. *Proceedings of the American Society for Information Science and Technology, 43*, 283. Retrieved October 21, 2007, from Wiley InterScience.
- Bates, M. E. (2006, January/February). Tag—You're it! *Online (Weston CT), 30*, 64. Retrieved October 21, 2007, from Wilson Library Literature & Information Science.
- Dye, J. (2006, April). Folksonomy: A game of high-tech (and high-stakes) tag. *E- Content*, 29, 38-43. Retrieved September 23, 2007, from Wilson Library Literature & Information Science.
- Fichter, D. (2006, May/June). Intranet applications for tagging and folksonomies. Online (Weston, CT), 30, 43-5. Retrieved October 8, 2007, from EBSCOhost Academic Search Premier.
- Golder, S. A., & Huberman, B. A. (2006). Usage patterns of collaborative tagging systems. *Journal of Information Science*, 32, 198-208. Retrieved October 8, 2007 from Sage Journals Online.
- Gordon-Murnane, L. (2006, June). Social bookmarking, folksonomies, and Web 2.0 tools. *Searcher*, *14*, 26-38. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Kroski, E. (2005, December 7). *The hive mind: Folksonomies and user-based tagging*. Retrieved October 8, 2007, from http://infotangle.blogsome.com/2005/12/07/the-hive-mind-folksonomies-and-user-based-tagging
- Kroski, E. (2007). Folksonomies and user-based tagging. In N. Courtney (Ed.), Library 2.0 and beyond: Innovative technologies and tomorrow's user (pp. 91-103). Westport, CT: Libraries Unlimited.
- Macgregor, G., & McCulloch, E. (2006). Collaborative tagging as a knowledge organisation and resource discovery tool. *Library Review*, *55*, 291-300. Retrieved October 8, 2007, from Emerald.
- Maness, J. M. (2006). Library 2.0: The next generation of Web-based library services. *Logos*, 17, 139-45. Retrieved November 11, 2007, from Wilson Library Literature & Information Science.

- Noruzi, A. (2007, June). Folksonomies: Why do we need controlled vocabulary? *Webology, 4.* Retrieved September 23, 2007, from http://www.webology.ir/2007/v4n2/editorial12.html
- Peterson, E. (2006, November). Beneath the metadata: Some philosophical problems with folksonomy. *D-Lib Magazine*, 12. Retrieved September 23, 2007, from http://www.dlib.org/dlib/november06/peterson/11peterson.html
- Rethlefsen, M. L. (2007, January). Chief Thingamabrarian. *Library Journal*, *132*, 40-42. Retrieved October 14, 2007, from Wilson Library Literature and Information Science.
- Rethlefsen, M. L. (2007, September 15). Tags help make libraries Del.icio.us: Social bookmarking and tagging boost participation. *Library Journal*, 132, 26-28.
- Sheehan, K. (2007, Summer). Library Thing for Libraries. *Library Journal*, 132(NetConnect Suppl.), 3.
- Spiteri, L. F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, 51, 75-89.
- Spiteri, L. F. (2007, June). Structure and form of folksonomy tags: The road to the public library catalogue. *Webology, 4.* Retrieved September 23, 2007 from, http://www.webology.ir/2007/v4n2/a41.html
- Weinberger, D. (2005, May 13). *Tagging and why it matters*. Retrieved on October 8, 2007, from http://cyber.law.harvard.edu/home/2005-07
- West, J. (2007, April/May). Subject headings 2.0: Folksonomies and tags. *Library Media Connection*, 25, 58-9. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Wyatt, N. (2007, November 1). 2.0 for readers: Online innovations reinvent how we use a classic RA tool--annotations. *Library Journal*, 132, 30-33.

#### **CHAPTER III**

#### **METHODOLOGY**

This thesis concerned the concept of user-generated tagging in the OPACs of public libraries. User-generated tagging is a new phenomenon which is included under the broader term of folksonomy. There is little information on how librarians perceive of the topic of user-generated tagging in the public library OPAC.

Because librarians in public libraries are moving ahead, without the benefit of an abundance of scholarly research, a conclusion of the review of the literature was that more study is necessary so that public librarians can make informed decisions concerning the introduction of the concept of user-generated tagging in the public library OPAC to their patrons.

The methodology of the study was applied research. Applied research was chosen because it will provide practical, "immediately usable" information (Powell & Connaway, 2004, p. 53) on the concept of user-generated tagging in the public library OPAC. The research method chosen for the study of user-generated tagging in the public library OPAC was an attitudinal, researcher-created survey utilizing the online product *SurveyMonkey.com* (see Appendix A). Utilization of a survey provided contemporary data (Powell & Connaway, 2004) on the concept of user-generated tagging.

# Purpose and Research Questions

The purpose of the study was to survey southern New Jersey public librarians' attitudes towards the feasibility of including user-generated tagging in the public library OPAC.

Research questions for this study on user-generated tagging in the public library OPAC included:

- How did southern New Jersey public librarians rate the advantages of usergenerated tagging?
- How did southern New Jersey public librarians rate the disadvantages of usergenerated tagging?
- Did southern New Jersey public librarians agree that user-generated tagging and controlled subject headings could co-exist?
- According to southern New Jersey public librarians, what was the future of usergenerated tagging?
- What did southern New Jersey public librarians think about user-generated tagging in the OPAC?

# Data Collection Techniques

The data collection technique chosen for this study of user-generated tagging in the public library OPAC was an attitudinal, researcher-created survey utilizing the online product <code>SurveyMonkey.com</code>. <code>SurveyMonkey.com</code> (2007) was chosen because it is a tool which enables the creation of professional online surveys. <code>SurveyMonkey.com</code> has powerful reporting tools including graphs and charts and summaries of results. The

researcher-created survey was based on the first four research questions of the study and information gathered on these questions in the review of the literature.

## Sample and Population

The population of the study was librarians in public libraries in Southern New Jersey. Southern New Jersey included Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties. An invitation to participate in the survey on user-generated tagging and the public library OPAC was posted to the South Jersey Regional Library Cooperative (SJRLC) Listserv on February 12, 2008 (see Appendix B). SJRLC (2007) is a multi-type library membership organization including academic, institutional, public, school, and special libraries. The SJRLC listserv has 387 subscribers and approximately 62% of these are public libraries for an approximate number of 240 public library subscribers (P. Bromberg, personal communication, December 13, 2007).

Since the SJRLC listserv is open to multi-type libraries, two questions were added to the survey to determine the position held and type of library employed in by the participants. The surveys of participants not falling under the category of librarian in a public library were discarded.

#### Variables

The dependent variable of the study was the sum of the responses on the attitudes of the southern New Jersey public librarians towards the feasibility of user-generated tagging in the public library OPAC. Independent variables of the study were based on the research questions of the thesis and the information gathered in the literature review and are included in the following statements concerning user-generated tagging in the public library OPAC:

- Inclusive of everyone's vocabulary and reflective of everyone's needs without cultural, social, or political bias, offer the opportunity to discover "long tail" minority interests.
- Is fluid and current because it is created quickly and added immediately.
- Facilitates the discovery of unknown and unexpected resources.
- Is non-binary and can fit into multiple categories.
- Is democratic because everyone can add something and self-moderating because it is public with popular terms being relevant.
- Follows "desire lines" reflecting the direct information needs and desires of the user.
- Offers insight into user behavior by observing how others tag their resources and untraditional categories that emerge.
- Promotes sharing and community.
- Offers a low-cost alternative to a traditional, hierarchical taxonomy created by experts for Web resources.
- Offers a usable by all bottom-up rather than top-down approach which would require training and skill.
- With the amount of information online, offers a more scalable approach.
- Is a tool for adding metadata to digital content, increases findability of digital content, and supplements other traditional means of accessing information.
- Because of the social aspect people enjoy, are willing to, and with feedback, are encouraged to contribute.
- Takes away the anxiety of having to pick the exact term.

- Has a public and private aspect and can be contributed and viewed by anyone.
- Is most useful when there is no one in the 'librarian role' and there is too much content.
- Clarifies what an object means to others, is good enough reflecting users needs and way of thinking.
- Synonyms are controlled by users, and users regulate the use of singles versus plurals and acronyms.
- Lacks precision.
- Is a flat system with no hierarchy.
- Users make different choices for the same entity without the use of broader or narrower terms.
- System recall is lacking in the return of all related items.
- Users have the potential for gaming.
- Users regulate the use of homographs and abbreviations.
- Is personal.
- Single-word tagging may be required.
- There are different words and vocabularies with foreign languages.
- Users do not think like catalogers and terms relate to the present day.
- Will make searching on the Web easier and will replace traditional taxonomies.
- Will bridge the gap between user's and controlled vocabulary terms.
- User-generated tagging and controlled subject headings should co-exist.
- User-generated tagging and controlled subject headings could co-exist.

- Guidelines, dictionaries, thesauri, and reference sources should be provided.
- The ambiguities of user-generated tagging should remain.
- User-generated tagging may be a fad.
- Is beneficial for any item without metadata.
- Research is necessary in the area of user-generated tagging.

Statistical information was also gathered on the variable concerning whether or not the respondents to the survey utilized user-generated tagging or were considering the utilization of user-generated tagging in their public library OPACs.

#### **Procedures**

An invitation to participate in the online survey of user-generated tagging and the public library OPAC was posted on the SJRLC listserv on February 12, 2008. The invitation provided links to Michigan's Ann Arbor District Library (AADL) for examples of user-generated tagging terms included in a public library OPAC and SurveyMonkey.com for responses to the online survey. The survey contained two factual questions concerning the position held and the type of library employed in by the respondents. The survey utilized opinion questions and a Likert scale with three options for response. The first four research questions of the thesis and the information gathered in the literature review were the basis of the questions in the Likert scale. Responses to the survey included the option of choosing advantage, disadvantage, or both. Two factual questions were included as to whether the librarians currently had user-generated tagging in their OPACs and if the librarians were considering user-generated tagging in the OPAC in the future. All questions were closed and structured. Space was provided for an

open-ended, unstructured, free-text comment on the concept of user-generated tagging in the OPAC.

On February 28, 2008, a reminder to take part in the survey on user-generated tagging in the public library OPAC was posted on the SJRLC listserv (see Appendix C).

Results were tallied by *SurveyMonkey.com* and placed into an Excel spreadsheet and graphic representations for analysis.

# Validity and Reliability

The validity and reliability of the study were determined by pretesting the survey on February 4, 2008 with Dr. Marilyn L. Shontz and the students in the Rowan University Master of Arts in School and Public Librarianship *Graduate Thesis in Library Services* class. A student in class was confused by the term "flat classification system". At the suggestion of Dr. Shontz "flat classification system" was followed, in parentheses, by "no top down structure".

Before posting the reminder, on February 28, 2008, to take part in the survey on user-generated tagging and the public library OPAC, further changes to the survey were made. The purpose of the changes was to make the survey easier to complete. The first change, the addition of a progress bar, was at the suggestion of P. Bromberg (personal communication, February 12, 2008). Other changes were made in response to a participant comment (see comment 1 in Appendix D). Dr. Shontz suggested reordering the numbering of the survey statements, sequential numbering of all questions and statements, and eliminating the random ordering of the statement response options. None of these changes affected the responses previously collected.

## References

- aadl.org. (n.d.). Retrieved October 7, 2007, from http://www.aadl.org/sopac/tagcloud
- Bates, M. E. (2006, January/February). Tag—You're it! *Online (Weston CT)*, 30, 64. Retrieved October 21, 2007, from Wilson Library Literature & Information Science.
- Dye, J. (2006, April). Folksonomy: A game of high-tech (and high-stakes) tag. *E-Content*, 29, 38-43. Retrieved September 23, 2007, from Wilson Library Literature & Information Science.
- Fichter, D. (2006, May/June). Intranet applications for tagging and folksonomies. Online (Weston, CT), 30, 43-5. Retrieved October 8, 2007, from EBSCOhost Academic Search Premier.
- Golder, S. A., & Huberman, B. A. (2006). Usage patterns of collaborative tagging systems. *Journal of Information Science*, 32, 198-208. Retrieved October 15, 2007 from Sage Journals Online.
- Gordon-Murnane, L. (2006, June). Social bookmarking, folksonomies, and Web 2.0 tools. *Searcher*, *14*, 26-38. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Kroski, E. (2005, December 7). *The hive mind: Folksonomies and user-based tagging*. Retrieved October 8, 2007, from http://infotangle.blogsome.com/2005/12/07/the-hive-mind-folksonomies-and-user-based-tagging
- Kroski, E. (2007). Folksonomies and user-based tagging. In N. Courtney (Ed.), Library 2.0 and beyond: Innovative technologies and tomorrow's user (pp.91-103). Westport, CT: Libraries Unlimited.
- Macgregor, G., & McCulloch, E. (2006). Collaborative tagging as a knowledge organisation and resource discovery tool. *Library Review*, *55*, 291-300. Retrieved October 8, 2007, from Emerald.
- Noruzi, A. (2007, June). Folksonomies: Why do we need controlled vocabulary? *Webology, 4.* Retrieved September 23, 2007, from http://www.webology.ir/2007/v4n2/editorial12.html
- Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians* (4th ed.). Westport, CT: Libraries Unlimited.

- Rethlefsen, M. L. (2007, September 15). Tags help make libraries Del.icio.us: Social bookmarking and tagging boost participation. *Library Journal*, 132, 26-28.
- Sheehan, K. (2007, Summer). Library Thing for Libraries. *Library Journal*, 132(NetConnect Suppl.), 3.
- South Jersey Regional Library Cooperative. (n.d.). Retrieved November 23, 2007, from http://www.sjrlc.org
- Spiteri, L. F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, *51*, 75-89.
- Spiteri, L.F. (2007, June). Structure and form of folksonomy tags: The road to the public library catalogue. *Webology, 4*. Retrieved September 23, 2007 from, http://www.webology.ir/2007/v4n2/a41.html
- SurveyMonkey.com. (2007). Retrieved November 25, 2007, from http://www.surveymonkey.com
- Weinberger, D. (2005, May 13). *Tagging and why it matters*. Retrieved on October 8, 2007, from http://cyber.law.harvard.edu/home/2005-07
- West, J. (2007, April/May). Subject headings 2.0: Folksonomies and tags. *Library Media Connection*, 25, 58-9. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Wyatt, N. (2007, November 1). 2.0 for readers: Online innovations reinvent how we use a classic RA tool--annotations. *Library Journal*, 132, 30-33.

## **CHAPTER IV**

### **ANALYSIS OF DATA**

## Procedures/Methods Used

Participation in the survey on user-generated tagging and the public library OPAC through SurveyMonkey.com took place from February 12 through March 7, 2008. An email invitation to participate in the survey was posted to the South Jersey Regional Library Cooperative (SJRLC) Listserv on February 12, 2008 (see Appendix B). The SJRLC listserv had 387 subscribers and approximately 62% of these were public libraries for an approximate number of 240 public library subscribers (P. Bromberg, personal communication, December 13, 2007). Of the 240 subscribers, nineteen southern New Jersey public librarians completed the survey. Twelve public librarians started but did not complete the survey. Seven surveys were discarded because the respondents were ineligible to take part in the survey.

The pretesting of the survey on user-generated tagging and the public library OPAC took place on February 4, 2008 with Dr. Marilyn L. Shontz and the students in the Rowan University Master of Arts in School and Public Librarianship *Graduate Thesis in Library Services* class. One student in the class was confused by the term "flat classification system". At the suggestion of Dr. Shontz "flat classification system" was followed, in parentheses, by "no top down structure."

Before posting the reminder e-mail (see Appendix C), on February 28, 2008, to take part in the survey on user-generated tagging and the public library OPAC, further

changes were made. The purpose of the changes was to make the survey easier to participate in. Changes were made because of participant comments and the failure of twelve southern New Jersey public librarians to complete the survey. The first change, the addition of a progress bar, was made at the suggestion of P. Bromberg (personal communication, February 12, 2008). Other changes were made in response a participant comment (see comment 1 in Appendix D). During the February 25, 2008 class session, Dr. Shontz suggested reordering the numbering of the survey statements, sequential numbering of all questions and statements, and eliminating the random ordering of the statement response options. None of the changes affected the data as collected.

Results of the survey were tabulated by SurveyMonkey.com. Response percents and counts were provided.

# Statistical Analysis Used

The statistical analysis used for the study on user-generated tagging and the public library OPAC was descriptive. SurveyMonkey.com response percents and counts were provided in relation to the response options of yes or no for questions one, two, thirty-three, and thirty-four and for the response options of advantage, disadvantage, or both for statements three through thirty-two. For further analysis and clarification, the response counts, with the exception of those for questions one and two, were put into an Excel spreadsheet by the researcher allowing the creation of graphs.

### Presentation of Results

The survey on user-generated tagging and the public library OPAC consisted of four questions and thirty statements. Space was provided for comments. Question one and two eliminated any participants who were not employed as public librarians in

southern New Jersey. Questions thirty-three and thirty-four were on the utilization of user-generated tagging or the possible utilization of user-generated tagging in the public library OPAC in the future. The thirty survey statements were based on the first four research questions of the thesis and the information gathered on these questions in the review of the literature in Chapter II.

Results of the survey were based on the responses of the nineteen eligible participants who were public librarians in southern New Jersey and who completed all or most of the survey. Nineteen surveys were eliminated because the respondents were ineligible to take part in the study or did not complete the survey.

Question one of the survey asked if the respondent was employed as a public librarian. In response to the question, all nineteen of the participants answered yes.

Question two of the survey asked if the respondent was employed in southern New Jersey. In response to the question, all nineteen of the participants answered yes.

Possible responses to the thirty statements of the survey were advantage, disadvantage, or both. The results of the survey were organized according to these three responses.

In response to fourteen statements, including four, six, seven, eight, sixteen, eighteen, nineteen, twenty, twenty-one, twenty-two, twenty-five, twenty-nine, thirty-one, and thirty-two, the answer advantage was chosen most often by participants (see Figure 1 on p. 35).

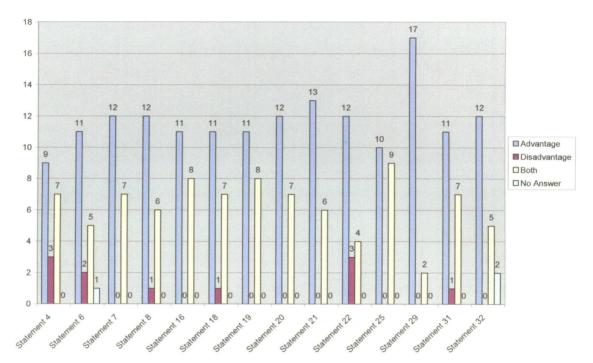


Figure 1. Advantage Chosen Most Often

- Statement 4. User-generated tagging is created quickly and added immediately.
- Statement 6. User-generated tagging can fit into multiple categories.
- Statement 7. User-generated tagging promotes community.
- Statement 8. User-generated tagging reflects the user's needs and desires.
- Statement 16. User-generated tagging can be used for adding metadata.
- Statement 18. With user-generated tagging, users do not have to pick the exact term.
- Statement 19. User-generated tagging can be expanded in relation to the amount of information online.
- Statement 20. With feedback, users are encouraged to contribute to user-generated tagging.
- Statement 21. User-generated tagging increases the findability of digital content.
- Statement 22. With user-generated tagging, the specialized interests of a minority of users are represented.
- Statement 25. With user-generated tagging, unknown and unexpected resources can be discovered.
- Statement 29. User-generated tagging and controlled subject headings can co-exist.
- Statement 31. Guidelines can be provided for user-generated tagging.
- Statement 32. Research can be conducted in the area of user-generated tagging.

Statement four of the survey was user-generated tagging is created quickly and added immediately. In response to statement four, nine participants chose advantage, three chose disadvantage, and seven chose both.

Statement six of the survey was user-generated tagging can fit into multiple categories. In response to statement six, eleven participants chose advantage, two chose disadvantage, five chose both, and one did not respond.

Statement seven of the survey was user-generated tagging promotes community.

In response to statement seven, twelve participants chose advantage and seven chose both.

Statement eight of the survey was user-generated tagging reflects the user's needs and desires. In response to statement eight, twelve participants chose advantage, one chose disadvantage, and six chose both.

Statement sixteen of the survey was user-generated tagging can be used for adding metadata. In response to statement sixteen, eleven participants chose advantage and eight chose both.

Statement eighteen of the survey was with user-generated tagging, users do not have to pick the exact term. In response to statement eighteen, eleven participants chose advantage, one chose disadvantage, and seven chose both.

Statement nineteen of the survey was user-generated tagging can be expanded in relation to the amount of information online. In response to statement nineteen, eleven participants chose advantage and eight chose both.

Statement twenty of the survey was with feedback, users are encouraged to contribute to user-generated tagging. In response to statement twenty, twelve participants chose advantage and seven chose both.

Statement twenty-one of the survey was user-generated tagging increases the findability of digital content. In response to statement twenty-one, thirteen participants chose advantage and six chose both.

Statement twenty-two of the survey was with user-generated tagging, the specialized interests of a minority of users are represented. In response to statement twenty-two, twelve participants chose advantage, three chose disadvantage, and four chose both.

Statement twenty-five of the survey was with user-generated tagging, unknown and unexpected resources can be discovered. In response to statement twenty-five, ten respondents chose advantage and nine chose both.

Statement twenty-nine of the survey was user-generated tagging and controlled subject headings can co-exist. In response to statement twenty-nine, seventeen participants chose advantage and two chose both.

Statement thirty-one of the survey was guidelines can be provided for usergenerated tagging. In response to statement thirty-one, eleven participants chose advantage, one chose disadvantage, and seven chose both.

Statement thirty-two of the survey was research can be conducted in the area of user-generated tagging. In response to statement thirty-two, twelve participants chose advantage, five chose disadvantage, and two did not respond.

In response to the two statements twenty-three and twenty-seven, disadvantage was chosen most often by participants (see Figure 2).

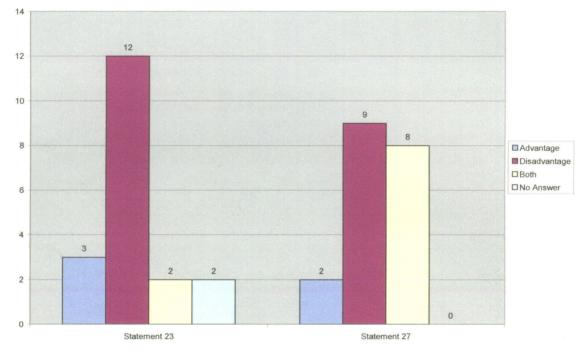


Figure 2. Disadvantage Chosen Most Often

Statement 23. User-generated tagging is good enough.

Statement 27. User-generated tagging can replace traditional subject headings.

Statement twenty-three of the survey was user-generated tagging is good enough. In response to statement twenty-three, twelve participants chose disadvantage, three chose advantage, two chose both, and two did not respond.

Statement twenty-seven of the survey was user-generated tagging can replace traditional subject headings. In response to statement twenty-seven, nine participants chose disadvantage, eight chose both, and two chose advantage.

In response to thirteen statements, including three, five, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty-four, twenty-six, and thirty, the answer both was chosen most often by participants (see Figure 3).

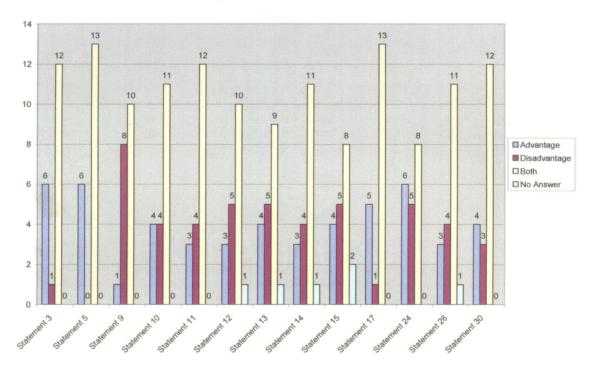


Figure 3. Both Chosen Most Often

- Statement 3. With user-generated tagging, everyone can add something.
- Statement 5. User-generated tagging is personal.
- Statement 9. User-generated tagging provides a low-cost alternative to professionally created subject-headings.
- Statement 10. Because of the public aspect, user-generated tagging is self-moderating.
- Statement 11. Users regulate the structure and form of user-generated tagging.
- Statement 12. User-generated tagging is a flat classification system (no top down structure).
- Statement 13. With user-generated tagging, single-word tags may be required.
- Statement 14. With user-generated tagging, synonyms are controlled by users.
- Statement 15. User-generated tagging has the potential for gaming.
- Statement 17. User-generated tagging is both public and private.
- Statement 24. With user-generated tagging, there are different foreign words and vocabularies.
- Statement 26. With user-generated tagging, precision is optional.
- Statement 30. The long-term prospects of user-generated tagging have yet to be discovered.

Statement three of the survey was with user-generated tagging, everyone can add something. In response to statement three, twelve participants chose both, six chose advantage, and one chose disadvantage.

Statement five of the survey was user-generated tagging is personal. In response to statement five, thirteen participants chose both and six chose advantage.

Statement nine of the survey was user generated tagging provides a low-cost alternative to professionally created subject-headings. In response to statement nine, ten participants chose both, one chose advantage, and eight chose disadvantage.

Statement ten of the survey was because of the public aspect, user-generated tagging is self-moderating. In response to statement ten, eleven participants chose both, four chose advantage, and four chose disadvantage.

Statement eleven of the survey was users regulate the structure and form of usergenerated tagging. In response to statement eleven, twelve participants chose both, three chose advantage, and four chose disadvantage.

Statement twelve of the survey was user-generated tagging is a flat classification system (no top down structure). In response to statement twelve, ten participants chose both, three chose advantage, five chose disadvantage, and one did not respond.

Statement thirteen of the survey was with user-generated tagging, single-word tags may be required. In response to statement thirteen, nine participants chose both, four chose advantage, five chose disadvantage, and one did not respond.

Statement fourteen of the survey was with user-generated tagging, synonyms are controlled by users. In response to statement fourteen, eleven participants chose both, three chose advantage, four chose disadvantage, and one did not respond.

Statement fifteen of the survey was user-generated tagging has the potential for gaming. In response to statement fifteen, eight participants chose both, four chose advantage, five chose disadvantage, and two did not respond.

Statement seventeen of the survey was user-generated tagging is both public and private. In response to statement seventeen, thirteen participants chose both, five chose advantage, and one chose disadvantage.

Statement twenty-four of the survey was with user-generated tagging, there are different foreign words and vocabularies. In response to statement twenty-four, eight participants chose both, six chose advantage, and five chose disadvantage.

Statement twenty-six of the survey was with user-generated tagging, precision is optional. In response to statement twenty-six, eleven participants chose both, three chose advantage, four chose disadvantage, and one did not respond.

Statement thirty of the survey was the long-term prospects of user-generated tagging have yet to be discovered. In response to statement thirty, twelve participants chose both, four chose advantage, and three chose disadvantage.

In response to statement 28, disadvantage and both were chosen with equal frequency by participants (see Figure 4).

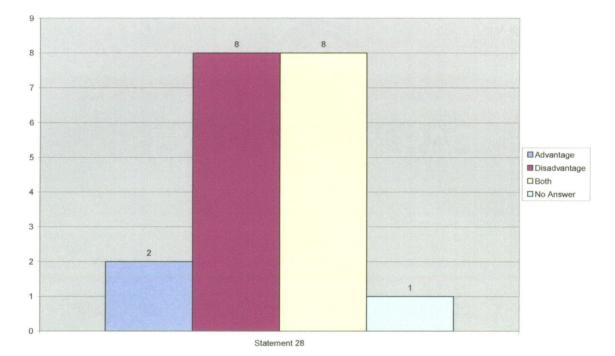


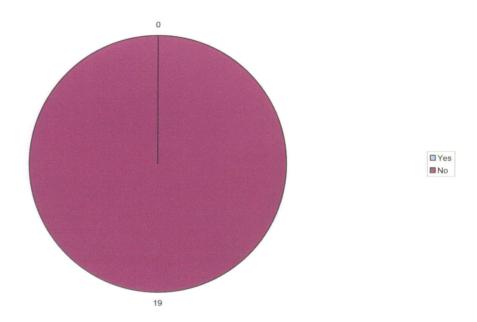
Figure 4. Disadvantage and Both Chosen With Equal Frequency

Statement 28: The ambiguities of user generated tagging can remain.

Statement twenty-eight of the survey was the ambiguities of user-generated tagging can remain. In response to statement twenty-eight, eight participants chose disadvantage, eight participants chose both, two chose advantage, and one did not respond.

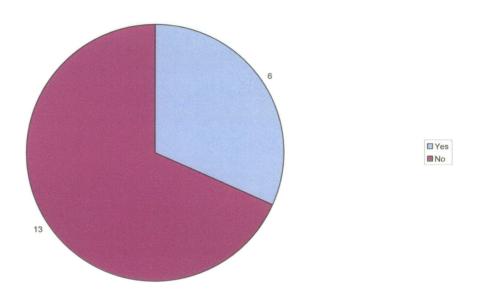
Question thirty-three of the survey asked do you currently have user-generated tagging in your OPAC. In response to the question, all nineteen participants answered no (see Figure 5).

Figure 5. Do You Currently Have User-Generated Tagging in Your OPAC?



Question thirty-four of the survey asked if respondents were considering having user-generated tagging in the OPAC in the future. In response to question thirty-four, six participants answered yes and thirteen answered no (see Figure 6).

Figure 6. Are You Considering Having User-Generated Tagging in Your OPAC in the Future?



# References

South Jersey Regional Library Cooperative. (n.d.). Retrieved November 23, 2007, from http://www.sjrlc.org

SurveyMonkey.com. (2007). Retrieved November 25, 2007, from http://www.surveymonkey.com

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

# Discussion and Interpretation of Results

The thesis investigated the concept of user-generated tagging in the OPACs of public libraries in southern New Jersey. The purpose of the study was to survey southern New Jersey public librarians' attitudes towards the feasibility of including user-generated tagging in the public library OPAC.

Research questions for this study on user-generated tagging in the public library OPAC included:

- How did southern New Jersey public librarians rate the advantages of usergenerated tagging?
- How did southern New Jersey public librarians rate the disadvantages of usergenerated tagging?
- Did southern New Jersey public librarians agree that user-generated tagging and controlled subject headings could co-exist?
- According to southern New Jersey public librarians, what was the future of usergenerated tagging?
- What did southern New Jersey public librarians think about user-generated tagging in the OPAC?

# How Did Southern New Jersey Public Librarians Rate the Advantages of User-Generated Tagging?

For statement three, with user-generated tagging, everyone can add something, six southern New Jersey public librarians chose advantage, twelve chose both, and one chose disadvantage.

For statement four, user-generated tagging is created quickly and added immediately, nine southern New Jersey public librarians chose advantage, seven chose both, and three chose disadvantage.

For statement six, user-generated tagging can fit into multiple categories, eleven southern New Jersey public librarians chose advantage, five chose both, two chose disadvantage, and one did not respond.

For statement seven, user-generated tagging promotes community, twelve southern New Jersey public librarians chose advantage and seven chose both.

For statement eight, user-generated tagging reflects the user's needs and desires, twelve southern New Jersey public librarians chose advantage, six chose both, and one chose disadvantage.

For statement nine, user-generated tagging provides a low-cost alternative to professionally created subject-headings, ten southern New Jersey public librarians chose both, eight chose disadvantage, and one chose advantage.

For statement ten, because of the public aspect, user-generated tagging is self-moderating, eleven southern New Jersey public librarians chose both, four chose advantage, and four chose disadvantage.

For statement sixteen, user-generated tagging can be used for adding metadata, eleven southern New Jersey public librarians chose advantage and eight chose both.

For statement seventeen, user-generated tagging is both public and private, thirteen southern New Jersey public librarians chose both, five chose advantage, and one chose disadvantage.

For statement eighteen, with user-generated tagging, users do not have to pick the exact term, eleven southern New Jersey public librarians chose advantage, seven chose both, and one chose disadvantage.

For statement nineteen, user-generated tagging can be expanded in relation to the amount of information online, eleven southern New Jersey public librarians chose advantage and eight chose both.

For statement twenty, with feedback, users are encouraged to contribute to usergenerated tagging, twelve southern New Jersey public librarians chose advantage and seven chose both.

For statement twenty-one, user-generated tagging increases the findability of digital content, thirteen southern New Jersey public librarians chose advantage and six chose both.

For statement twenty-two, with user-generated tagging, the specialized interests of a minority of users are represented, twelve southern New Jersey public librarians chose advantage, four chose both, and three chose disadvantage.

For statement twenty-three, user-generated tagging is good enough, twelve southern New Jersey public librarians chose disadvantage, three chose advantage, two chose both, and two did not respond.

For statement twenty-five, with user-generated tagging, unknown and unexpected resources can be discovered, ten southern New Jersey public librarians chose advantage and nine chose both.

How Did Southern New Jersey Public Librarians Rate the Disadvantages of User-Generated Tagging?

For statement five, user-generated tagging is personal, thirteen southern New Jersey public librarians chose both and six chose advantage.

For statement eleven, users regulate the structure and form of user-generated tagging, twelve southern New Jersey public librarians chose both, four chose disadvantage, and three chose advantage.

For statement twelve, user-generated tagging is a flat classification system (no top down structure), ten southern New Jersey public librarians chose both, five chose disadvantage, three chose advantage, and one did not respond.

For statement thirteen, with user-generated tagging, single-word tags may be required, nine southern New Jersey public librarians chose both, five chose disadvantage, four chose advantage, and one did not respond.

For statement fourteen, with user-generated tagging, synonyms are controlled by users, eleven southern New Jersey public librarians chose both, four chose disadvantage, three chose advantage, and one did not respond.

For statement fifteen, user-generated tagging has the potential for gaming, eight southern New Jersey public librarians chose both, five chose disadvantage, four chose advantage, and two did not respond.

For statement twenty-four, with user-generated tagging, there are different foreign words and vocabularies, eight southern New Jersey public librarians chose both, six chose advantage, and five chose disadvantage.

For statement twenty-six, with user-generated tagging, precision is optional, eleven southern New Jersey public librarians chose both, four chose disadvantage, three chose advantage, and one did not respond.

Did Public Librarians Agree That User-Generated Tagging and Controlled Subject

Headings Could Co-Exist?

For statement twenty-seven, user-generated tagging can replace traditional subject headings, nine southern New Jersey public librarians chose disadvantage, eight chose both, and two chose advantage.

For statement twenty-nine, user-generated tagging and controlled subject headings can co-exist, seventeen southern New Jersey public librarians chose advantage, and two chose both.

According to Southern New Jersey Public Librarians,

What Was the Future of User-Generated Tagging?

For statement twenty-eight, the ambiguities of user-generated tagging can remain, eight southern New Jersey public librarians chose both, eight chose disadvantage, two chose advantage, and one did not respond.

For statement thirty, the long-term prospects of user-generated tagging have yet to be discovered, twelve southern New Jersey public librarians chose both, four chose advantage, and three chose disadvantage.

For statement thirty-one, guidelines can be provided for user-generated tagging, eleven southern New Jersey public librarians chose advantage, seven chose both, and one chose disadvantage.

For statement thirty-two, research can be conducted in the area of user-generated tagging, twelve southern New Jersey public librarians chose advantage, five chose both, and two did not respond.

What Did Southern New Jersey Public Librarians Think About

User-Generated Tagging in the OPAC?

In answer to question thirty-three, do you currently have user-generated tagging in your OPAC, nineteen southern New Jersey public librarians responded no.

In answer to question thirty-four, are you considering having user-generated tagging in your OPAC in the future, six southern New Jersey public librarians responded yes and thirteen responded no.

### Conclusions

How Did Southern New Jersey Public Librarians Rate the

Advantages of User-Generated Tagging?

The majority of librarians chose advantage (see Figure 1 on p. 35) for:

- Statement four, user-generated tagging is created quickly and added immediately.
- Statement six, user-generated tagging can fit into multiple categories.
- Statement seven, user-generated tagging promotes community.
- Statement eight, user-generated tagging reflects the user's needs and desires.
- Statement sixteen, user-generated tagging can be used for adding metadata.

- Statement eighteen, with user-generated tagging, users do not have to pick the exact term.
- Statement nineteen, user-generated tagging can be expanded in relation to the amount of information online.
- Statement twenty, with feedback, users are encouraged to contribute to usergenerated tagging.
- Statement twenty-one, user-generated tagging increases the findability of digital content.
- Statement twenty-two, with user-generated tagging, the specialized interests of a minority of users are represented.
- Statement twenty-five, with user-generated tagging, unknown and unexpected resources can be discovered.
  - The majority of librarians chose disadvantage (see Figure 2 on p. 38) for:
- Statement twenty-three, user-generated tagging is good enough.

  The majority of librarians chose both (see Figure 3 on p. 39) for:
- Statement three, with user-generated tagging, everyone can add something.
- Statement nine, user-generated tagging provides a low-cost alternative to professionally created subject-headings.
- Statement ten, because of the public aspect, user-generated tagging is selfmoderating.
- Statement seventeen, user-generated tagging is both public and private.

# How Did Southern New Jersey Public Librarians Rate the Disadvantages of User-Generated Tagging?

The majority of librarians chose both (see Figure 3 on p. 39) for:

- Statement five, user-generated tagging is personal.
- Statement eleven, users regulate the structure and form of user-generated tagging.
- Statement twelve, user-generated tagging is a flat classification system (no top down structure).
- Statement thirteen, with user-generated tagging, single-word tags may be required.
- Statement fourteen, with user-generated tagging, synonyms are controlled by users.
- Statement fifteen, user-generated tagging has the potential for gaming.
- Statement twenty-four, with user generated tagging, there are different foreign words and vocabularies.
- Statement twenty-six, with user-generated tagging, precision is optional.

Did Southern New Jersey Public Librarians Agree That User-Generated Tagging and
Controlled Subject Headings Could Co-Exist?

The majority of librarians chose advantage (see Figure 1 on p. 35) for:

 Statement twenty-nine, user-generated tagging and controlled subject headings can co-exist.

The majority of librarians chose disadvantage (see Figure 2 on p. 38) for:

• Statement twenty-seven, user-generated tagging can replace traditional subject headings.

According to Southern New Jersey Public Librarians,

What Was the Future of User-Generated Tagging?

The majority of librarians chose advantage (see Figure 1 on p. 35) for:

- Statement thirty-one, guidelines can be provided for user-generated tagging.
- Statement thirty-two, research can be conducted in the area of user-generated tagging.

The majority of librarians chose both (see Figure 3 on p. 39) for:

 Statement thirty, the long-term prospects of user-generated tagging have yet to be discovered.

The majority of librarians chose disadvantage and both with equal frequency (see Figure 4 on p. 42) for:

• Statement twenty-eight, the ambiguities of user-generated tagging can remain.

What Did Southern New Jersey Public Librarians Think About

*User-Generated Tagging in the OPAC?* 

In answer to question thirty-three, do you currently have user-generated tagging in your OPAC, nineteen librarians responded no (see Figure 5 on p. 43).

In answer to question thirty-four, are you considering having user-generated tagging in your OPAC in the future, six librarians responded yes and thirteen responded no (see Figure 6 on p. 44).

# Significance of Results

For how did southern New Jersey public librarians rate the advantages of usergenerated tagging, the most significant results were for statement twenty-one, usergenerated tagging increases the findability of digital content. Also significant was the response of both, by the majority of the librarians to statement seventeen, user-generated tagging is both public and private. Even more significant was the response of disadvantage by the majority of the librarians for statement twenty three, user-generated tagging is good enough. "Good enough" was not acceptable to the majority of the southern New Jersey public librarians who responded to the statement. Another possible explanation could be that in trying to make the survey statement concise, the researcher took the statement out of its original context and confused the respondents. The complete statement was: Weinberger (2005) felt that along with a social aspect, user-generated tagging clarifies, not what an object is about, but what it means to others. Users are not going to wait for an authority. User generated tagging may be messy, inelegant and inefficient" but will be "good enough" reflecting users needs and way of thinking (para. 6).

The majority of the responses for how southern New Jersey public librarians rated the disadvantages of user-generated tagging were both. Kroski (2005; 2007), in summarizing the disadvantages of user-generated tagging and folksonomies, felt that for every negative, there are supporters who will find an advantage. This could be one explanation for the response of both by the majority of the librarians to all of the statements under the disadvantages of user-generated tagging. In one instance though, the response of both by the majority of librarians to statement fifteen, user-generated tagging has the potential for gaming was surprising. It is felt by the researcher that the southern New Jersey public librarians were confused by gaming and may have mistaken the term for playing a game rather than spamming.

The most significant response of the study, under did southern New Jersey public librarians agree that user-generated tagging and controlled subject headings could coexist, was the response of advantage to statement twenty-nine, user-generated tagging and controlled subject headings can co-exist. In response to statement twenty-nine, seventeen of the nineteen southern New Jersey public librarians chose advantage.

For the statement with according to southern New Jersey public librarians, what was the future of user-generated tagging, the most significant response was to statement thirty-two, research can be conducted in the area of user-generated tagging. Spiteri (2006) commented that there has been a sparse amount of study on the topic of user-generated tagging in the public library OPAC. Further research on the concept was recommended.

For the research question what did southern New Jersey public librarians think about user-generated tagging in the OPAC, in answer to question thirty-three, there were no librarians who had user-generated tagging in their OPAC. Kroski (2007) stated that user-generated tagging was a new phenomenon brought about by the introduction of Web 2.0. In spite of the novelty of the concept of user-generated tagging in the public library OPAC, six southern New Jersey public librarians responded yes to question thirty-four and were considering having user-generated tagging in their OPAC in the future.

# Recommendations for Further Study

A disappointing number of twelve public librarians in southern New Jersey started but did not complete the survey. A comment from one of the librarians, who did not complete the survey and was not included in the results, was "I have absolutely no idea what this survey is about." Another librarian who completed the survey commented "In this survey, it seems from the questions that you expect all librarians in South Jersey

to know what user-generated tagging is, and the ins and outs of its use. That's quite an assumption..." (see comment 2 in Appendix D). Again, as stated by Kroski (2007), user-generated tagging is a new phenomenon, and this novelty may have prompted these comments from the librarians. With the sparse amount of research on the topic of user-generated tagging (Spiteri, 2006), one possible unexpected outcome for this study on user-generated tagging and the public library OPAC may be to help southern New Jersey librarians become aware of the concept. With the librarians' comments, a recommendation of this study was that more research on the topic of user-generated tagging and the public library OPAC is necessary so that all public librarians in southern New Jersey will become aware of the concept of user-generated tagging. With research, the librarians will be able to make informed decisions concerning the topic of user-generated tagging.

User-generated tagging in the public library OPAC is just one area of Library 2.0. The thesis was narrowed to this one topic, but, even at that, a large amount of information was covered. The amount of information necessitated the utilization of a lengthy survey. In the future, perhaps just one aspect of user-generated tagging, such as, can user-generated tagging and controlled subject headings co-exist, could be studied. The change may encourage more librarians to take part in the survey.

To get a more valid response rate, the survey could be opened to include all librarians in southern New Jersey or the entire state. The survey could also be opened to include public librarians in a broader geographic area.

If user-generated tagging becomes a fixture in public library OPACs and is not "more than just a fad" (Dye, 2006, para. 38), the study could be repeated to see if the

attitudes of the public librarians in southern New Jersey towards the concept have changed. In repeating the study, it would be hoped that more librarians would respond to the survey.

## References

- Dye, J. (2006, April). Folksonomy: A game of high-tech (and high-stakes) tag. *E-Content*, 29, 38-43. Retrieved September 23, 2007, from Wilson Library Literature & Information Science.
- Kroski, E. (2005, December 7). *The hive mind: Folksonomies and user-based tagging.* Retrieved October 8, 2007, from http://infotangle.blogsome.com/2005/12/07/the-hive-mind-folksonomies-and-user-based-tagging
- Kroski, E. (2007). Folksonomies and user-based tagging. In N. Courtney (Ed.), Library 2.0 and beyond: Innovative technologies and tomorrow's user (pp. 91-103). Westport, CT: Libraries Unlimited.
- Spiteri, L. F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, *51*, 75-89.
- Weinberger, D. (2005, May 13). *Tagging and why it matters*. Retrieved on October 8, 2007, from http://cyber.law.harvard.edu/home/2005-07

#### REFERENCES

- aadl.org. (n.d.). Retrieved October 7, 2007, from http://www.aadl.org/sopac/tagcloud
- Abbas, J., & Graham, J. (2006). So, let's talk about tagging, user-defined/supplied descriptors...A research and curricular agenda. *Proceedings of the American Society for Information Science and Technology, 43*, 283. Retrieved October 21, 2007, from Wiley InterScience.
- Bates, M. E. (2006, January/February). Tag—You're it! *Online (Weston CT), 30*, 64. Retrieved October 21, 2007, from Wilson Library Literature & Information Science.
- de la Pēna McCook, K. (2004). *Introduction to public librarianship*. New York: Neal-Schuman Publishers, Inc.
- Dye, J. (2006, April). Folksonomy: A game of high-tech (and high-stakes) tag. *E-Content*, 29, 38-43. Retrieved September 23, 2007, from Wilson Library Literature & Information Science.
- Fichter, D. (2006, May/June). Intranet applications for tagging and folksonomies. Online (Weston, CT), 30, 43-5. Retrieved October 8, 2007, from EBSCOhost Academic Search Premier.
- Golder, S. A., & Huberman, B. A. (2006). Usage patterns of collaborative tagging systems. *Journal of Information Science*, 32, 198-208. Retrieved October 8, 2007 from Sage Journals Online.
- Gordon-Murnane, L. (2006, June). Social bookmarking, folksonomies, and Web 2.0 tools. *Searcher*, *14*, 26-38. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Ishizuka, K. (2006, October). A book lover's MySpace. *School Library Journal*, 52, 24-5. Retrieved September 23, 2007, from Wilson Library Literature and Information Science.
- Kroski, E. (2005, December 7). *The hive mind: Folksonomies and user-based tagging*. Retrieved October 8, 2007, from http://infotangle.blogsome.com/2005/12/07/the-hive-mind-folksonomies-and-user-based-tagging
- Kroski, E. (2007). Folksonomies and user-based tagging. In N. Courtney (Ed.), Library 2.0 and beyond: Innovative technologies and tomorrow's user (pp. 91-103). Westport, CT: Libraries Unlimited.

- Macgregor, G., & McCulloch, E. (2006). Collaborative tagging as a knowledge organisation and resource discovery tool. *Library Review*, *55*, 291-300. Retrieved October 8, 2007, from Emerald.
- Maness, J. M. (2006). Library 2.0: The next generation of Web-based library services. *Logos*, 17, 139-45. Retrieved November 11, 2007, from Wilson Library Literature & Information Science.
- Merriam-Webster's Collegiate Dictionary (11th ed.). (2005). Springfield, MA: Merriam-Webster, Incorporated.
- National Information Standards Organization. (2005, July 25). Guidelines for the construction, format, and management of monolingual controlled vocabularies. Bethesda, MD: NISO Press. Retrieved on November 23, 2007, from http://www.niso.org/standards/resources/Z39-19-2005.pdf
- Noruzi, A. (2007, June). Folksonomies: Why do we need controlled vocabulary? *Webology, 4.* Retrieved September 23, 2007, from http://www.webology.ir/2007/v4n2/editorial12.html
- Ojala, M. (2007, May/June). Web 2.0 and value-added indexing. *Online* (Weston, CT), 31, 5. Retrieved October 8, 2007 from Wilson Library Literature & Information Science.
- Peterson, E. (2006, November). Beneath the metadata: Some philosophical problems with folksonomy. *D-Lib Magazine*, *12*. Retrieved September 23, 2007, from http://www.dlib.org/dlib/november06/peterson/11peterson.html
- Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians* (4th ed.). Westport, CT: Libraries Unlimited.
- Reitz, J. M. (2004-6). *ODLIS-Online dictionary for library and information science*. Retrieved October 14, 2007, from http://lu.com/odlis
- Rethlefsen, M. L. (2007, January). Chief Thingamabrarian. *Library Journal*, 132, 40-42. Retrieved October 14, 2007, from Wilson Library Literature and Information Science.
- Rethlefsen, M. L. (2007, September 15). Tags help make libraries Del.icio.us: Social bookmarking and tagging boost participation. *Library Journal*, 132, 26-28.
- Sheehan, K. (2007, Summer). Library Thing for Libraries. *Library Journal*, 132(NetConnect Suppl.), 3.

- South Jersey Regional Library Cooperative. (n.d.). Retrieved November 23, 2007, from http://www.sjrlc.org
- Spiteri, L. F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, *51*, 75-89.
- Spiteri, L. F. (2007, June). Structure and form of folksonomy tags: The road to the public library catalogue. *Webology*, *4*. Retrieved September 23, 2007 from, http://www.webology.ir/2007/v4n2/a41.html
- SurveyMonkey.com. (2007). Retrieved November 25, 2007, from http://www.surveymonkey.com
- Taylor, A. G. (2004). *The organization of information* (2nd ed.). Westport, CT: Libraries Unlimited.
- Weinberger, D. (2005, May 13). *Tagging and why it matters*. Retrieved on October 8, 2007, from http://cyber.law.harvard.edu/home/2005-07
- West, J. (2007, April/May). Subject headings 2.0: Folksonomies and tags. *Library Media Connection*, 25, 58-9. Retrieved October 14, 2007, from Wilson Library Literature & Information Science.
- Wyatt, N. (2007, November 1). 2.0 for readers: Online innovations reinvent how we use a classic RA tool--annotations. *Library Journal*, 132, 30-33.

# APPENDIX A SURVEY

User-Generated Tagging and the Public Library OPAC
1. Demographics
Please complete this survey if you are employed as a public librarian in Southern New Jersey. Southern New Jersey includes Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties.  User-generated tagging is defined as a type of indexing controlled by users. For purposes of this study users will be over the age of thirteen.  Your responses to this survey will remain completely anonymous.
1. Ave you constant as a mubile librarian?
1. Are you employed as a public librarian?  Yes No
2. Are you employed in Southern New Jersey?
Yes No
2. Survey
Please answer advantage, disadvantage, or both to the following questions.
3. With user-generated tagging, everyone can add something.  Advantage Disadvantage Both
4. User-generated tagging is created quickly and added immediately.
Advantage Disadvantage Both
5. User-generated tagging is personal.
Advantage Disadvantage Both
6. User-generated tagging can fit into multiple categories.
Advantage Disadvantage Both
7. User-generated tagging promotes community.
Advantage Disadvantage Both
3. Survey
Please answer advantage, disadvantage, or both to the following questions.

User-Generated Tagging and the Public Library OPAC
8. User-generated tagging reflects the user's needs and desires.
Advantage
Disadvantage
Both
9. User-generated tagging provides a low-cost alternative to professionally created
subject-headings.
Disadvantage
Both Advantage
10. Because of the public aspect, user-generated tagging is self-moderating.
Advantage Disadvantage
Both
11. Users regulate the structure and form of user-generated tagging.
Advantage
Disadvantage
Both
12. User-generated tagging is a flat classification system (no top down structure).
Advantage
Disadvantage
Both
13. With user-generated tagging, single-word tags may be required.
Q Advantage
Disadvantage  Both
14. With user-generated tagging, synonyms are controlled by users.
Advantage Disadvantage
Both
15. User-generated tagging has the potential for gaming.
Advantage
Disadvantage
O Both
16. User-generated tagging can be used for adding metadata.
Advantage
Disadvantage
Both

User-Generated Tagging and the Public Library OPAC
17. User-generated tagging is both public and private.
Advantage Disadvantage
Both
4. Survey
Please answer advantage, disadvantage, or both to the following questions.
18. With user-generated tagging, users do not have to pick the exact term.
Advantage
Disadvantage Both
19. User-generated tagging can be expanded in relation to the amount of
information online.
Advantage
Disadvantage Both
20. With feedback, users are encouraged to contribute to user-generated tagging.
Advantage Disadvantage
Both
21. User-generated tagging increases the findability of digital content.
Advantage
Disadvantage  Both
22. With user-generated tagging, the specialized interests of a minority of users are
represented.
Advantage
Disadvantage  Both
23. User-generated tagging is good enough.
Q Advantage
Disadvantage  Both
24. With user-generated tagging, there are different foreign words and
vocabularies.
Advantage
Disadvantage  Both

User-Generated Tagging and the Public Library OPAC	
25. With user-generated tagging, unknown and unexpected resources can be discovered.  Advantage Disadvantage Both	
26. With user-generated tagging, precision is optional.  Advantage Disadvantage Both	
27. User-generated tagging can replace traditional subject headings.  Advantage Disadvantage Both	
5. Survey	
Please answer advantage, disadvantage, or both to the following questions.	
28. The ambiguities of user-generated tagging can remain.  Advantage Disadvantage Both  29. User-generated tagging and controlled subject headings can co-exist.  Advantage Disadvantage Disadvantage Both	
30. The long-term prospects of user-generated tagging have yet to be discovered.  Advantage Disadvantage Both	
31. Guidelines can be provided for user-generated tagging.  Advantage Disadvantage Both	
32. Research can be conducted in the area of user-generated tagging.  Advantage Disadvantage Both	
6. Questions	ø

User-Ger	erated Tag	ging and the Public Library OPA	
33. Do y	ou currently h	ave user-generated tagging in your OPAC	??
No Yes			
	you considerin	g having user-generated tagging in your	OPAC in the future?
Yes No			
7. Comme	e <b>nts</b>		
35. Plea	se feel free to	add comments.	
	- Principal Communication (Communication (Communica		
8. Thank	You		
Thank you for	taking the time to	complete this survey.	
Andrea McDona Rowan Univers Glassboro, NJ mcdona09@stu			
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# APPENDIX B E-MAIL INVITATION

## Dear SJRLC Listserv Members,

I am a graduate student at Rowan University in Glassboro, New Jersey, and a member of the SJRLC listserv. For my master's in public librarianship thesis, I am researching the Library 2.0 concept of user-generated tagging and the public library OPAC. For an example of user-generated tagging terms, please click on the link to the Ann Arbor District Library at <a href="http://www.aadl.org/sopac/tagcloud">http://www.aadl.org/sopac/tagcloud</a>

I am requesting assistance from librarians employed in Southern New Jersey public libraries in the completion of an online survey on the concept of user-generated tagging and the public library OPAC. The survey can be accessed by going to SurveyMonkey.com at <a href="http://www.surveymonkey.com/s.aspx?sm=6\_2bEgH07y64j\_2faf5kkh\_2bsjg\_3d\_3d">http://www.surveymonkey.com/s.aspx?sm=6\_2bEgH07y64j\_2faf5kkh\_2bsjg\_3d\_3d</a> by February 22, 2008, if possible.

Responses to the survey will be kept anonymous and confidential. Results of the survey will be sent to participants who wish to include their e-mail address in the space provided at the end of the survey. Inclusion of e-mail addresses to obtain survey results is voluntary and optional.

Your participation in the survey on the concept of user-generated tagging and the public library OPAC is greatly appreciated. Thank you for your time and assistance.

Sincerely,

Andrea McDonald Rowan University Glassboro, NJ mcdona09@students.rowan.edu

Andrea C. McDonald Helene Fuld School of Nursing in Camden County, Library PO Box 1669, College Drive Blackwood, NJ 08012 856-481-9103 FAX 856-481-9104 ACMcdonald@virtua.org

# APPENDIX C E-MAIL INVITATION REMINDER

## Dear SJRLC Listserv Members.

About two weeks ago, I sent an invitation to this listserv to take part in a survey on the concept of user-generated tagging and the public library OPAC. As a public library graduate student at Rowan University, I am in the process of completing my master's thesis under the direction of Dr. Marilyn Shontz at <a href="mailto:shontz@rowan.edu">shontz@rowan.edu</a>

If you have already completed the survey, I would like to extend my sincere thank you. If you did not have the opportunity to respond to the first invitation, the survey is still available, and I would be very appreciative of your assistance. If you were on the site before and did not complete the survey, some changes have been made to make the survey easier to respond to. Please try the survey again.

I am requesting assistance from librarians employed in Southern New Jersey public libraries in the completion of the online survey on the concept of user-generated tagging and the public library OPAC. For an example of user-generated tagging terms, please click on the link to the Ann Arbor District Library at <a href="http://www.aadl.org/sopac/tagcloud">http://www.aadl.org/sopac/tagcloud</a>

The survey can be accessed by going to SurveyMonkey.com at <a href="http://www.surveymonkey.com/s.aspx?sm=6\_2bEgH07y64j\_2faf5kkh\_2bsjg\_3d\_3d">http://www.surveymonkey.com/s.aspx?sm=6\_2bEgH07y64j\_2faf5kkh\_2bsjg\_3d\_3d</a> by March 7, 2008, if possible.

Responses to the survey will be kept anonymous and confidential. Results of the survey will be sent to participants who wish to include their e-mail address in the space provided at the end of the survey. Inclusion of e-mail addresses to obtain survey results is voluntary and optional.

Your participation in the survey on the concept of user-generated tagging and the public library OPAC is greatly appreciated. Thank you for your time and assistance.

Sincerely,

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# APPENDIX D

COMMENTS

#### Comments

- 1. "Some of the questions should have been agree or disagree because I disagreed with the premise of some of the statements which were given as if they were true. I also didn't like how the answer choices jumped around and were in different positions for different questions. That made me think that there was some logical pattern to how they were arranged."
- 2. "In this survey, it seems from the questions that you expect all librarians in South Jersey to know what user-generated tagging is, and the ins and outs of its use. That's quite an assumption. Many of the questions on the survey couldn't be answered without some explanation."
- 3. "Interesting concept. Wikipedia also has some information on this topic."
- 4. "Survey difficult to answer. Sometimes a "yes or no", or "agree or disagree" would be more appropriate than Advantage and Disadvantage. You ask questions requiring an opinion other than advantage and disadvantage so I don't know if you are going to get an accurate outcome."
- 5. "Since I have no experience with this type of indexing my answers only reflect assumptions I have about this type of indexing."