

Virtual Communities: A Global Resource

Shawna Hellenius

School of Library, Archival and Information Studies
University of British Columbia
shellenius@yahoo.com

Ann Curry

School of Library, Archival and Information Studies
University of British Columbia
ann.curry@ubc.ca

ABSTRACT

Building communities within communities has always been a public library service. Libraries have traditionally facilitated this through gatherings in library meeting rooms and dissemination of contact information about local clubs and municipal services, but virtual Internet-based communities can now provide a powerful, more wide-ranging avenue for customer to customer communication. Transaction log analysis of Internet use in Burnaby (BC) Public Library showed that customers are accessing virtual community sites, indicating that reference librarians should become more aware of these sites as valuable reference resources.

RÉSUMÉ

Construisant des communautés à l'intérieur des communautés était toujours un service de la bibliothèque publique. Les bibliothèques ont facilité traditionnellement cela à travers des rassemblements dans des salles de réunions de bibliothèque et à travers la dissemination de l'information de liaison en ce qui concerne les clubs locaux et les services municipaux, mais les communautés basées sur l'Internet peuvent maintenant fournir une route profonde et de grande envergure pour la communication du client-e au client-e. L'analyse de l'opération du journal de bord de l'emploi de l'Internet à *Burnaby (BC) Public Library* a montré que les client-e-s accèdent aux sites virtuels socioculturels, en indiquant que les bibliothécaires d'ouvrages de référence devraient prendre conscience de ces sites comme des ressources de référence de valeur.

The face of community has changed in the context of networked technology. An important new medium for community discourse has arisen—virtual community. Such communities fulfill the goals of the public library in two ways: through the provision of a global reference resource, and through the ability to link people with similar interests. The public library's goal to build geographically linked communities should naturally extend to fostering global communities on the Internet by providing access—essentially meeting areas—to online communities. This paper introduces the importance of virtual community to libraries by tracing the library institution's longstanding role in the history of community building.

WHAT ARE LIBRARY CUSTOMERS LOOKING AT ONLINE?

The emergence of virtual communities as a resource for public library customers was evident in the results of a transaction log analysis study completed in November, 2000 by a six-member research team from the School of Library,

Archival, and Information Studies at the University of British Columbia. The team analyzed a sample of the logs from all public Internet access terminals at the Burnaby (BC) Public central library and three branches during the week of March 5 to 11, 2000. The logs contained all of the URL addresses for that seven-day period which, once stripped of .gifs and j.pegs, equaled approximately 22,000 lines of data. The logs included a time notation that showed when the customer accessed a particular URL. Using that time column, the researchers obtained a sample of the logs by selecting a URL address every five minutes. They accessed the actual web site visited by the customer, and classified it using a system developed by the team. A full report of the methodology and results is available on the Burnaby Public Library home page <www.bpl.burnaby.bc.ca>.

The researchers found it necessary to add “web or virtual community” to the classification scheme soon after the analysis began because sites that did not fit into existing categories were encountered with increasing frequency. These sites were not passive portals to other information, nor were they strictly chat sites. These virtual community sites were meeting places for people with similar interests or agendas who, despite being scattered around the world, communicated through the Internet, purchased specialized items, and sought information. It was evident from the research that these communities were an important resource for customers, and one with which librarians should become much more familiar.

WHAT IS A “VIRTUAL COMMUNITY”?

Virtual communities are comprised of people who share social interaction and common ties (around an interest, profession, political view, ability, background, race, gender, sexual orientation, etc) and have access to an area in which to interact on the Internet where they “converse” about topics of interest. The World Wide Web hosts thousands of community sites that often require membership (usually free) and allow members to access all or some of the following services: communication devices such as chat, bulletin boards and listservs, Web space or profile pages, email, events and news. While not all of these characteristics are necessary, interaction with other members is a key ingredient.

An example of such a community is Asian Avenue <<http://www.asianavenue.com>>, a place for North Americans of Asian descent. This was the most accessed community during the Burnaby Internet study. Here, people can meet others and find information that reflects their cultures and perspectives. Bulletin board categories cover a wide range of topics, from “Arts” to “Campus Life” to “Money.” Within these categories are hundreds more topics. Some “conversations” have been continuing for over a year with daily postings from members.

There has been much debate on the legitimacy of virtual communities. So let’s back up a little and examine that complex creature, “community,” before we delve into its virtual equivalent. To convincingly define a *virtual* community, one must first determine a definition for community itself. This is not as easy as it first

appears, since each discipline, from sociology to economics, has a different definition.

What does the average person think of when presented with the term “community?” Traditionally, communities are fixed in geographically proximate areas—neighbourhoods. They grow within the boundaries of specific places—the library, the local pub, the church, a street block or community centre—through frequent accidental personal encounters.

But community need not be fixed. Rather, it is fluid, depending on the individuals who make up the community. Lee Komito identified three varieties of community in his discussion of electronic communities:

1. Proximate: as described above, generally characterized by accidental encounters due to close proximity of residents that lead to complex social networks.
2. Moral: members are bound by a strong commitment to one another and common goals, such as political or spiritual beliefs.
3. Normative: members share a framework of understanding, such as an area of employment, class, ethnicity, etc., which binds them together under the rules and norms established by the community. Alistair Black (1997) descriptively labeled these communities as “communities of interest.”

Black also discussed a fourth type of community:

4. Communities of need: people sharing common support needs. This type of community is characterized by a high level of empathy between members.

Some believe physical proximity to be the essence of community, however, Komito argues that geographically based communities are relatively new: “It is only since the Agricultural Revolution that individuals can be ‘tethered’ by house, property, employment, land, to a specific location” (2001). Komito also insists that these communities cannot be reproduced electronically, although some online applications, such as Cybertown <<http://www.cybertown.com>> have tried. However, it is the moral and need variety of communities that public libraries traditionally support through access to free or inexpensive meeting areas. Not surprisingly, it is also these sorts of communities that often aggregate around the electronic format for community building.

The emergence of virtual communities is merely a new variety of community, which emerged as a result of a number of evolutionary factors, such as post-industrialization and the effects of technology on the work environment. Once you give people anywhere a new communication tool, they will inevitably use it to build community. Just as telegraphs, telephones, and televisions breached distance,

so does the World Wide Web (Rheingold 1993).

Libraries have been partners in the evolution of community through time. Even the earliest libraries provided customers with the services and spaces to form social relationships while sharing information. Adjacent to the room which held shelves of scrolls and tables, the Library at Alexandria for several centuries B.C. provided a sumptuous room with couches where a scholar could meet with others who had traveled far to use this Library (Canfora 1989, 78). Archeological digs reveal that many Roman and Greek libraries had meeting rooms near the scroll storage area, where authors could read their works and lead discussions with gatherings of interested readers (Harris 1995, 62).

The precursor of the modern public library, The Mechanics Institutes, also provided services to build communities within a community. A primary focus of these institutes, which began in the U.K. and spread to Canada in the early 1800s, was book circulation, but lectures and discussion groups were also a high priority (Kelly 1966, 235). The institute librarian organized weekly or monthly library gatherings of members with similar interests or hobbies, e.g. literary topics, ethics, scientific discoveries, travel adventures. Books about a topic of common interest were often scarce or unavailable so members valued this opportunity to share information and seek advice from others brought together by a common focus. Several decades later, Andrew Carnegie fostered this sharing of information between customers when he included a library meeting room in his recommended architectural plans for buildings he intended to fund. (Bobinski, 1969). Library records from the early 1900s reveal that Carnegie libraries hosted guest speakers and discussion groups focused on topics as wide ranging as growing roses, eugenics, Shakespeare's tragedies, and voting rights for women and immigrants.

Virtual communities, then, appear to be well situated within public libraries, as traditional communities are also rooted there. However, sociologists, communications theorists, computer scientists, and psychologists have been arguing the finer points of the characteristics of virtual community since 1984 (Kiesler, Siegel, McGuire 1984, 1123-34). And they are still arguing. So let's leave them to it and instead examine the types of virtual communities you need to provide easy access to in your library and why.

TYPES OF VIRTUAL COMMUNITY

Reva Basch reminds Net users that "interactivity doesn't necessarily mean community" (Rogers & Oder 1999). Members of a community must be identified within a distinctive interest group. In that regard, Yahoo is not a community, even though it offers interactive features, because its users don't share a distinctive characteristic other than their use of the service.

Likewise, a bulletin board attached to an electronic magazine is not

necessarily a community. A community must generate its own content through its users. While the readers of the magazine may share a distinctive interest, if the pre-edited and selected content of the magazine comprises the majority of the communication, its readership should not be considered a form of community. If, however, the content on the bulletin boards were to transcend the content of the magazine and take a life of their own, such as Women.com <<http://www.women.com>> then a community is born.

Communication Media

Virtual communities utilize many mediums for communication: usenet, mailing lists, bulletin boards and chat, to name a few.

Chat

Chat involves real-time interaction, where users are communicating live with one another on the screen. Commercial sites like Talk City <<http://www.talkcity.com>> offer a wide range of topics, including scheduled chats with celebrity guests and experts. The disadvantage of chat as a medium for community is its tendency toward the shallow and trivial. Due to its immediacy, users rarely have time to provide thoughtful conversation.

Usenet

Usenet is not part of the World Wide Web, but requires special software and is copied to many participant Internet sites around the world. Usenet contains several thousand communities in its subject groups called newsgroups. Here, you can find even the most obscure topics.

Mailing lists

Also known as listservs, mailing lists are email-based discussion groups. Participants must subscribe to the list, therefore, conversations are often more thoughtful than newsgroups because members are committed to the list, and aren't just "dropping in" like newsgroup members.

Bulletin Boards

Bulletin boards form the heart of Web-based virtual communities. Designed to encourage long-term participation, the Website provides a sense of a shared online "homebase" for its members, while the bulletin boards serve up difference flavours of well thought out topics of interest. Members can "drop-by" at any time of the day or night to post messages in response to comments made by previous users. Collectively, the posts form a conversation that reads like a script and continues for days, months or years.

THE VALUE OF VIRTUAL COMMUNITIES TO PUBLIC LIBRARIES

The value of virtual communities lies in their ability to reach anyone who has access to the Internet, whether through home, work or the public library. They provide a rich information environment for goal-oriented seekers, company for the isolated and reciprocal empathy for those in need of support. The two main areas of interest to public library customers that virtual communities can fulfill are factual information seeking and emotional support services – the same areas fulfilled by the more traditional communities formed in library meeting rooms or by local clubs whose contact data are in the library community information database.

Virtual communities function as forums for either goal-oriented information retrieval or as browsable “information neighbourhoods” (Burnett 2000). Participants regularly request information and are answered directly by other members of the community.

Public libraries are generally associated with communication between the customer and the librarian, or communication between the customer and a passive impersonal information source such as a book. But libraries also play a role in customer-to-customer interaction by facilitating the gathering of people with a common interest. This role is important as it ensures that information not readily available in other sources can be acquired and shared. Public libraries build communities in many ways, but this linking of individuals, building communities within communities, is an important initiative in the creation of a strong societal web. According to G. Jefferson:

The combination of “human association” and “communication” that governs the tissue of social relationships christened as “society” is fundamental, by definition, to the library. Because it expresses a functional relationship between the two, the library is essentially a response to society as a complex system of inter-related groupings, institutions and individuals: a system that is in a state of constant change with implicit consequences upon the apparatus of communication developed to hold together the “web of social relationships. (Jefferson 1969, xi).

Information sharing can be closely linked with emotional support. For people in isolated, rural communities, virtual communities are a lifeline that provide access to special interest groups, even though the closest member may be hundreds of miles away. This is particularly important for lesbian and gay teens, ethnic minorities, people with disabilities and other marginalized groups. They may not find anyone in their proximate neighbourhood to connect with, indeed they are likely to find intolerance in their geographic community, but they can discover a warm and welcoming community through a modem.

In addition to providing physical meeting space, public libraries have also provided contact information to customers about groups in the local community,

enabling customers to connect with the meetings or activities of these groups off library premises. Joan Durrance defines this referral service, known as “community information,” as “anything that helps people cope with problems of daily living and facilitates community participation. It includes information about human services (health care, financial assistance, housing, etc.) as well as information on local recreation programs, clubs, community events, and all levels of government, including participation in the political process.” (Durrance 2000, 44). Until the mid 1980s, librarians organized this information about groups by compiling large card files of addresses; in the 1990s they created special computer databases. This role of connecting customers with community resources and groups gained particular prominence in the U.K., where governments funded many local data gathering and dissemination projects whose aim was to enhance the economic and social development of the community by creating a web of support for those needing information (Black 1997; Mohan 1999; Rowlatt 2000; Yu 1999).

The studies cited above often explore the value of small communities, the human need for association, and the role (as noted by Jefferson above) of libraries in meeting both societal and individual needs by helping people feel more secure within their larger geographic communities by facilitating their entry into a smaller, more defined community - a “group of people who share a range of values of values, a way of life, identify with the group and its practices and recognize each other as members of that group.” (Mason 2000, 21).

Jenny Preece and Kambiz Ghazati found that empathy is an essential component in online support communities, particularly patient support or emotional support communities, and that it also has a role in most other virtual communities. “Physicians can provide the facts, but other patients can tell you what it really feels like and what to expect next, in a way that only someone with personal experience can” (Preece 1998). In their examination of 100 virtual communities, they found that 81% contained some empathic messages, with 18% being predominantly empathic (Preece & Ghazati 1998). They conclude that online communities provide essential support and may be particularly important for people living in isolated localities.

The information needs of these virtual community members are obviously transcending a factual exchange of information. “Members of patient support communities not only want information about their condition, but may also seek empathy from their fellow sufferers” (Preece & Ghazati 1998). There are virtual support communities for parents of children with special needs, survivors of sexual abuse, or people with particular health problems. This alone is of tremendous value to librarians. Where do you send someone from the reference desk for empathy if your locale’s community resources don’t support it?

In librarians’ duty to connect people with information it is also implicit that we need to connect people with experts, or others who have had similar experiences. These

people can act as an information resource that can, in some ways, be much richer than the data found in a book. Virtual communities make this level of reference service a possibility. Public libraries can play a part in equalizing access to this virtual meeting space by providing access from public Internet terminals, and including virtual communities in their lists of online resources.

If public libraries are serious about fostering the growth of communities, a commitment to providing free and unfiltered access to virtual communities through Internet terminals would certainly enhance this role. As we have seen, public library Internet terminals not only provide a conduit to information, but a world of common interests, peers and community groups. Many without home Internet access could be left out of global community groups and peer support available online. The fact that librarians need to be aware of this resource is evidenced by the lack of links to virtual communities on library sites.

Community rates high on the agenda of the American Library Association: the theme of the 2000 Chicago conference was ‘Libraries Build Community’ and the journal *Public Libraries* devoted the January 2001 theme issue to this topic. Within this issue, columnist Terry Link writes:

I argue that we are entering a new age, beyond the Information Age, and librarians must position themselves as leaders within it. The “Age of Relationships” is upon us, whether we recognize it or not. We are awash in information. But with all this information at our fingertips, we have yet to find solutions to the major problems confronting our humanity – population, water quality and shortages, crime, disease, social disaffection, decline in biodiversity, and others. The solutions will not come from an emphasis on “information” but more from understanding and nurturing of “relationships.” (Link 2001, 15)

HOW TO LOCATE VIRTUAL COMMUNITIES

One of the disadvantages of virtual communities is that it is often difficult to find them, or difficult to locate well-populated, quality communities that highlight specific items of interest. Although “virtual community” is currently the preferred term, there is no controlled term for the phenomenon and few directories exist. If it is difficult for information professionals to find issue- or subject-specific virtual communities, it is likely to be nearly impossible for most Web users, who often have a conceptual misunderstanding of how to effectively navigate the Web and resort to surfing or serendipity to locate relevant material (“Report on Web Use” 2001, 9).

If the lack of controlled searching isn’t problematic enough on the Web, then the enigmatic nature of virtual communities makes locating them a challenge. Also known as Web communities, online communities, Internet communities, groups, clubs, chats, and “special interest groups” or SIGS, “virtual community” is

rarely recognized, in so many terms, by its creators.

For a specific topic, such as homeschooling, very few virtual community sites will actually use the terms “virtual,” “online,” or “Web” anywhere on the page. It is best to enter the subject and the term “community” with a Boolean “and”: homeschooling and community. However, if this strategy retrieves too many results, try using a phrase search: “homeschooling community” to reduce the number of results.

However, this is not the most effective method, since “homeschooling community” can be listed within *any* number of documents discussing the physical community. This is where users must turn from hunting to grazing. Go to an official site on the topic, look for a link to something called “forum,” “chat,” “bulletin,” “boards,” or another term that suggests access to a communication device. This occasionally leads the user to an online community. Entering the term “message boards” with the subject into a search engine can also yield improved results.

Directories

There are few quality search engines or directories that focus on virtual communities, but several directories for mailing lists, which are often tied to a virtual community website. Yahoo and the Open Directory Project both include category headings for mailing lists.

Below is a list of available directories:

Forum Finder <http://www.forumone.com>

Index for virtual communities

Google Groups <http://groups.google.com>

Directory of Usenet newsgroups, plus fulltext searching for newsgroup articles

List of Lists <http://catalog.com/vivian/interest-group-search.html>

Liszt <http://www.liszt.com>

Publicly Accessible Mailing Lists <http://paml.net>

Various commercial portals and service providers have carefully built a reputation as areas of online conversation, with forums and discussion areas dedicated to various topics. These aren't virtual communities in themselves, but they can lead users to virtual communities.

AOL <http://groups.aol.com>

Compuserve Forums <http://www.compuserve.com>

Delphi <http://www.delphi.com>

Yahooclubs <http://clubs.yahoo.com>

Yahogroups <http://groups.yahoo.com>

Quality Check

The most interesting virtual communities appear to have been, at one time, preceded by print or electronic publications. The Well, Utne Reader and Salon.com have all had their origins in magazines. Overall, there are four areas to look at when judging the quality of a virtual community: (1) Traffic volume – how much discussion is going on? If there are only five posts over a one-year period, then the community has no committed members. Look at the dates of the posts, are they current or did the list die a year ago? (2) Discussion quality – are the discussions arranged by topics? Are there thoughtful answers to inquiries? If discussion is arranged in threads, is there a high level of respondents to one member's post? This shows that community members are committed to one another and there is reciprocal discussion and advice. (3) Design – is the site easy to navigate? (4) Value to members – browse the posts, do you see return members? If so, then the community may be their online home, and operates as a valued resource for them.

SUMMARY

Librarians must recognize more clearly the importance of virtual communities as information resources and as library tools for overall community building. As noted by Terry Link (2001, 15), connecting individuals with others who can provide information and support must remain a key role of the public library. These connections can be global and geared to very specific subject interests when librarians add the world of virtual communities to their Internet reference skill sets. Our customers deserve nothing less.

APPENDIX:

VIRTUAL COMMUNITIES: A SAMPLER

ARTISTS:

Faces

<http://www.rpi.edu/~huffman/faces.html>

A mailing list connecting women who share an interest in media and communication arts. It is not a chat list but a resource through which women can share projects, exhibitions and critical opinions. Free membership, but short biography and work sample required.

DIVERSITY:

Asian Avenue

<http://www.asianavenue.com>

A virtual community for North Americans of Asian descent. Hosts bulletin boards, chat and events. Target audience appears to be for teens and adults under 30. Free membership.

Y? National Forum on People's Differences

<http://www.yforum.com/welcome1.html>

A forum in which to ask people from other ethnic or cultural backgrounds controversial or uncomfortable questions. Y? staff evaluate all questions before posting to their bulletin boards and find someone from that background or an expert to answer. Users can also answer questions related to their own demographic background. Free membership.

EDUCATION

African American Homeschoolers

<http://groups.yahoo.com/group/AfricanAmerhomschler>

An electronic list for African American parents who homeschool their children.

Home's Cool: Homeschool Community

<http://www.homes-cool.com>

A homeschooling community that includes forums, chat, resources, homeschool stories, and hosting services for quality homeschool personal sites. Free membership.

Palaver Tree: An Online Community of Oral History

<http://www.cc.gatech.edu/elc/palaver>

Kids interview their elders to create a shared tapestry of oral history. Young users read historical stories and brainstorm questions for elders based on what they have read. Elders respond with their own stories, photos, and more. Kids use these responses to build PalaverStories, online artifacts that share history.

FOOD & NUTRITION

Epicurious Food Forums

http://epicurious.com/a_home/a00_home/home.html

Provides chat areas, forums and file searches where you can look up cooking terms, favorite dishes and create a wine list from the Sommelier data base. Affiliated with *Gourmet* and *Bon Appétit* magazines. Free membership.

Fatfree

<http://www.fatfree.com>

For anyone interested in very low fat vegetarian foods and cooking. Members are dedicated and fiercely loyal and supportive to each other. Many members have credentials in nutrition so misinformation is rare and quickly corrected. High traffic, heavy rules, and free membership.

GARDENING**GardenWeb: The Internet's Garden Community**

<http://forums.gardenweb.com>

Hosts forums, garden exchanges, articles, contests, a plant database, a garden-related glossary and online catalogs. Free membership.

GENERAL:**Almac**

<http://www.almac.co.uk>

European online bulletin board community, headquartered in Scotland, covering broad cosmopolitan topics. Cost ranges depending on level of access, starting at £39/year.

Echo

<http://www.echonyc.com>

Online discussion about books, movies, arts, politics, angst—in a word, gossip. People on Echo frequently meet in-person through Echo events such as the reading series “Read Only.” An events page furthers Echo’s philosophy that the best online communities are not strictly virtual.

The Well

<http://www.well.com>

The grandmothers of virtual communities, The Well has thrived for over 15 years, after being launched by the writers and readers of the *Whole Earth Review*. It is an uninhibited intellectual gathering distinguished by non-anonymous participants. Cost: \$10/15 per month.

GLBT**Emergence Forum**

<http://www.emergenceministries.org/indexframe.html>

This forum provides a place for Christian transsexuals to share their faith, trials and victories in a safe environment over chat, email lists, and bulletin boards. Website includes essays, short stories, poetry and testimonies. Free membership.

Planetout

<http://www.planetout.com>

Entertainment, popular culture, news, member profiles, personal websites, chat, specialized communities for teens, seniors, families, bisexuals, transgendered people, and more. Plus a ton of

bulletin boards on every conceivable topic to discuss it all. Free membership.

HEALTH

Alzheimer List

<http://www.biostat.wustl.edu/alzheimer/>

Discussion ranges from the practical to the medical to the deeply emotional. The support, friendship and warmth in this virtual group is evident. This is the place to find solace and good advice. High traffic. Search tools are available for archived postings.

dr.koop.com

<http://www.drkoop.com/community/>

A consumer-focused Web site providing healthcare information on a wide variety of subjects, access to medical databases, other publications, real-time medical news and interactive communities.

Transformations

<http://www.transformations.com/>

Home base for a wide assortment of self-help communities. Bulletin boards cover topic areas from 12-step programs, travel, adoption, genealogy and support groups. The support group area alone features discussions ranging from the challenges facing abuse survivors to parents of children with Laurence Moon Beidl Syndrome. This group believes they can continuously improve themselves and their lives—and they're not averse to having some fun along the way.

INVESTMENT

ClearStation

<http://www.clearstation.com>

Investment community featuring portfolio management with investment education, analysis, and community discussion to help members make investment decisions. Free membership.

MILITARY

Military Orders

<http://www.militaryorders.com>

Online community and information source for military members and dependents. Features boards, chat, relocation guides, classified ads and more. Free membership.

SENIORS:

SeniorNet

<http://www.seniornet.com>

"Know what I love about SeniorNet (my homepage) and other computer sites I have found on the Internet? Everyone is so sweet and caring and generous with their help." ("Quote of the Week," *Senior Net*, <http://www.seniornet.com> (22 March 2001))

ThirdAge

<http://www.thirdage.com>

For aging baby boomers, ThirdAge provides many tools and resources related to seniors' lifestyles.

TECHNOLOGY

Afro-Techies

A list for technically-inclined women of African descent. Members need not be computer professionals but should be actively engaged in technology. Send a message to afro-techies-request@persephone.hampshire.edu with the word "subscribe" in the subject line.

Asia-Women-IT

A forum for the discussion of issues relating to women in Asia and new communications technology. Send the message: "subscribe Asia-women-IT <your e-mail address>" to majordomo@list.infocom.sequel.net.

Cybermind

<http://users.telarama.com/~tellis/cyber/cm.html>

A discussion list about the psychology and philosophical implications of the net experience. A high traffic list whose participants ask hard questions about cyberlife, such as using the net to address social problems, gender-bending, the psychoanalysis of lurking, and more.

Wise Women

<http://www.wise-women.org>

Community of web designers and programmers offering high-volume lists covering topics such as HTML coding, JavaScript, CSS, Flash, web design, starting a consulting business, being a female computer consultant, female web developer, or just plain female. Free membership.

TRAVEL

iAgora

iAgora is a virtual community for internationally-minded people who seek to study, work, and travel abroad, where members from 187 nationalities share the international experience. An excellent site to get personal recommendations from recent travelers.

WOMEN

iVillage.com

<http://www.ivillage.com>

Community for women that features personalized pages, interactive calendars, boards, chat and experts on topics from pregnancy to mechanics. Currently over 5 million members and ranking as one of the Web's most visited sites. Heavy advertising. Free membership.

Spiderwomen

<http://www.spiderwomen.org>

A global Internet community for feminists and a place for technology feminists to connect and share both resources and information. It is not a "how to" list for technologists but rather an activist center for feminism.

Women.com

<http://www.women.com>

A women's e-zine with a community section. Includes boards, chat, experts, games, and specialized online clubs such as a stork club for expecting mothers, a book club, and an entrepreneurs club. Free membership.

YOUTH

ChickClick.com

<http://www.chickclick.com>

A network of sites for young women with a following of over a million users. Features sassy content and community tools such as email, homepages, instant messaging, personalization, and message boards with topics anywhere from dealing with parents to drug recovery support. Heavy advertising. Free membership.

REFERENCES

- Black, Alistair, and Dave Muddiman. 1997. *Understanding community librarianship: The public library in post-modern Britain*. Aldershot: Avebury.
- Bobinski, George. 1969. *Carnegie libraries: their history and impact on American public library development*. Chicago: American Library Association.
- Burnett, G. 2000. Information exchange in virtual communities: a typology. *Information Research* 5 (4). Retrieved April 5, 2001 from the World Wide Web: <http://www.shef.ac.uk/~is/publications/infres/paper82a.html>
- Canfora, Luciano. 1989. *The vanished library*. Translated by Martin Ryle. London: Hutchison Radius.
- Durrance, Joan C. and Karen Pettigrew. 2000. Community information: The technological touch. *Library Journal* 125, 44.
- Harris, Michael. 1995. *History of libraries in the western world*. Metuchen, NJ: Scarecrow Press.
- Jefferson, G. 1969. *Libraries and society*. London: James Clarke.
- Kelly, Thomas. 1966. *Early public libraries: a history of public libraries in Great Britain before 1850*. London: The Library Association.
- Kiesler, S., Siegel, J., McGuire, T.W. 1984. Social psychological aspects of computer-mediated information. *American Psychologist* 39 (10), 1123-34
- Komito, L. 2001. Electronic Community in an Information Society: paradise, mirage, or malaise?. *Journal of Documentation* 57 (1). Retrieved April 5, 2001 from the World Wide Web: <http://www.ucd.ie/~lis/komito/jod.htm>
- Link, Terry. 2001. "Entering the age of relationships." *Public Libraries* 40(1), 15-16.
- Mason, Andrew. 2000. *Community, Solidarity and Belonging*. Cambridge: Cambridge University Press.
- Mohan, V.V and A.A. Raju. 1999. "Community information concepts." *Bulletin of Information Technology* 19(1): 5-14.
- Preece, J. 1998. Empathic Communities: Balancing Emotional and Factual Communication. Retrieved April 5, 2001 from the World Wide Web: <http://www.ifsm.umbc.edu/communities/IwCPreece2.html>
- Preece, J. & Ghozati, K. 1998. In Search of Empathy Online: A Review of 100 Online Communities. Retrieved April 5, 2001 from the World Wide Web: <http://www.isworld.org/ais.ac.98/proceedings/track02/preece.pdf>
- Report on Web Use. 2001. *BCLA Reporter* 45 (5), 9.
- Rogers, M. & Oder, N. 1999. Community is net librarian focus. *Library Journal* 124 (20), 16.
- Rowlatt, M. et al. 2000. *SEAMLESS: an organizational and technical model for seamless access to distributed citizen's information*. Library and Information Commission Research Report no. 37. London: British Library.
- Yu, L., L. Dempsey, and S. Ormes. 1999. "Community networking: development, potential and implications for public libraries." *Journal of Librarianship and Information Science* 31(2), 71-83.