

**Here a blog, there a blog,
what about the library blog?**

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Abstract

This small-scale research project investigated publicly accessible library blogs published in English in mid-2006. A total of 457 active library blogs from 11 countries were located using a variety of online resources and search techniques.

Content analysis was selected as the method of data analysis, and was applied to print-outs of the front page of each library blog. This data was coded to determine library blog demographics, to compile a comprehensive list of blog features and to establish the purpose(s) and use(s) of these library blogs. Results from the 2006 sample population were contrasted and compared with the most recent research into library blogs, which was conducted in 2003 (see Clyde, 2004a).

The findings of the 2006 research indicate that library blogs numbers have definitely increased since 2003, that there is a wide range of features demonstrated on library blogs and that the purposes and uses of library blogs are numerous and varied. This research report provides a detailed discussion of the methods and results of this small-scale research study.

Keywords

Blogs, library blogs, bloggers, blogosphere, weblogs

1.0 Significance of research study

Although blogging by both librarians and libraries has been promoted in the library literature since 2001 (see Crawford, 2001; Curling, 2001; Hane, 2001), and is still regularly advocated (see Balas, 2003; Fitcher, 2003; Huwe, 2003; Kenney and Stephens, 2005; Schwartz, 2005a), there has been little scholarly investigation of librarian and/or library blogs. While some researchers have recently started to examine the librarian blogosphere, that is, blogs maintained by librarians in a non-work capacity, (see Bar-Ilan, 2005; Crawford, 2005; Farkas, 2005; Laning *et al.*, 2005; Weibrands, 2006), research undertaken in late 2003 by Clyde (see Clyde, 2004a) remains the only overall study of the library blogosphere, that is, blogs maintained as part of a library in a work context.

Given that the global blogosphere has significantly expanded since the debut of freely available and easy-to-use blogging software in 1999, and continues to evolve at a phenomenal pace (see Sifry, 2006a), it is highly likely that the library blogosphere has grown and changed since Clyde's 2003 examination of library blogs.

This research study investigated the global library blog environment in 2006, focussing on publicly accessible, active library blogs published in English. The results provide an update on the state of the library blogosphere, identifying current library blog demographics, the types of features used in library blogs, and reveal how and why library blogs are being used in 2006. These results have been compared with Clyde's 2003 findings to illustrate how the 2006 library blogosphere has evolved. The research findings provide a timely update of the library blogosphere and will potentially enable libraries to actively determine which criteria, for example, software features and/or overall purpose, are critical in their decision to utilise blogs as part of an external communication strategy.

2.0 Research Outcomes

2.1 Research Questions

1. What are the demographics of library blogs in 2006?
2. What features appear on library blogs in 2006?
3. How and for what purposes are libraries using blogs in 2006?
4. How have library blogs changed since 2003?

2.2 Research Objectives

1. Identify the total number of active library blogs in 2006.
2. Establish the types of libraries using blogs in 2006.
3. Determine the country of origin of library blogs in 2006.
4. Ascertain the types of software used to maintain library blogs.
5. Compile a list of library blog features.
6. Investigate the use(s) and purpose(s) of library blogs in 2006.
7. Contrast and compare library blogs in 2006 with library blogs in 2003.

3.0 Definition of terms

Many of these terms relate to recent developments in the online environment and as such have been not yet been defined in official dictionaries, such as the *Oxford English Dictionary*. Hence some of the definitions have been sourced from World Wide Web resources, for example *Wikipedia*.

<i>blog</i> (n)	shortened form of weblog ¹ .
<i>blog</i> (v)	to write or maintain a blog ² .
<i>blogger</i> (n)	the author of a blog ³ .
<i>Blogger</i> (n)	brand of software used to create blogs ⁴ .
<i>blawg</i> (n)	a blog with emphasis on the law and/or legal related issues and concerns, often maintained by an individual who studies, practices or otherwise works in the legal field ⁵ .
<i>Bloggies</i> TM (n)	annual online awards, started in 2001 by Nikolai Nolan, whereby web users vote for the best blog in a variety of categories ⁶ .
<i>blogarian</i> (n)	a librarian or information professional who invests significant time and effort into creating and maintaining a high quality blog ⁷ .
<i>blogosphere</i> (n)	sum total of all blogs; the community of blogs ⁸ .
<i>blogroll</i> (n)	a collection of links to other blogs ⁹ .
<i>edu-blog</i> (n)	an education related blog ¹⁰ .

¹ OED Online 2006. Blog (n)

² OED Online 2006. Blog (v)

³ OED Online 2006. Blogger (n)

⁴ Available at <http://www.blogger.com/> [accessed 26 April, 2006].

⁵ Gratsch, 2005.

⁶ Available at <http://www.fairvue.com/bloggies/> [accessed 26 April, 2006].

⁷ Bar-Ilat, 2005:128.

⁸ Stone, 2004:230.

⁹ Available at <http://en.wikipedia.org/wiki/Blogroll> [accessed 2 August 2006].

¹⁰ Stone, 2004:232.

<i>HTML</i> (n)	acronym for Hyper Text Markup Language, a non-proprietary format based on Standard Generalised Markup Language (SGML) which uses tags to structure text into headings, paragraphs, links, lists, and links ¹¹ .
<i>metadata</i> (n)	descriptive data about an information system or an information object ¹² .
<i>moblog</i> (n)	contraction of mobile and weblog; type of blog where content is posted via mobile technology, such as a cell phone or a personal digital assistant (PDA) ¹³ .
<i>podcast</i> (n)	method of distributing multimedia files, such as audio or video programs, over the Internet using syndication feeds, for playback on mobile devices and personal computers ¹⁴ .
<i>post</i> (n)	an entry on a blog ¹⁵ .
<i>pundit blog</i> (n)	a blog focussed on mostly news and national affairs in the media ¹⁶ .
<i>RSS</i> (n)	a file format for messages and other information that is updated frequently, the documents written in these formats are called 'news feeds' or 'feeds' ¹⁷ .
<i>social bookmarking</i> (n)	a web-based service, where lists of user-created Internet bookmarks are displayed; content is generally organised by tags and inferences can be drawn from grouping and analysis of tags ¹⁸ .
<i>splog</i> (n)	spam blog, where articles and content are fake ¹⁹ .
<i>tag</i> (n)	a keyword or term used to classify content; typically chosen informally and personally by the creator of the item ²⁰ .
<i>tag cloud</i> (n)	a visual depiction of content tags used on a website ²¹ .
<i>trackback</i> (n)	a form of remote commenting that links a blog post to a related post on another blog ²² .

¹¹ Available at <http://www.netlingo.com/lookup.cfm?term=HTML> [accessed 5 September 2006].

¹² Available at <http://dublincore.org/documents/usageguide/glossary.shtml#M> [accessed 1 October, 2006]. See also <http://dublincore.org/documents/usageguide/#whatismetadata>

¹³ Available at <http://en.wikipedia.org/wiki/Moblog> [accessed 5 May 2006].

¹⁴ Available at <http://en.wikipedia.org/wiki/Podcast> [accessed 1 September 2006].

¹⁵ Wibbels, 2006:165.

¹⁶ Stone, 2004:235.

¹⁷ Wittenbrink, 2005.

¹⁸ Available at http://en.wikipedia.org/wiki/Social_bookmarking [accessed 1 October, 2006].

¹⁹ Available at <http://en.wikipedia.org/wiki/Splog> [accessed 1 October, 2006].

²⁰ Available at http://en.wikipedia.org/wiki/Tag_%28metadata%29 [accessed 1 October, 2006].

²¹ Available at http://en.wikipedia.org/wiki/Tag_cloud [accessed 1 October, 2006].

²² Wibbels, 2006:165.

<i>v-log</i> (n)	contraction of video-blog; type of blog that combines embedded video or a video link with supporting text and/or images ²³ .
<i>XML</i> (n)	acronym for eXtensible Markup Language, which is a programming specification based on Standard Generalised Markup Language (SGML) and enables web authors to create customised tags to provide greater functionality than other markup languages such as HTML ²⁴ .
<i>warblog</i> (n)	a blog that emerged after September 11, 2001, to cover reaction and related events such as terrorism, military action, and Middle East conflicts ²⁵ .
<i>weblog</i> (n)	a weblog, or blog, is a frequently updated website consisting of dated entries arranged in reverse chronological order so that the most recent post appears first ²⁶ .
<i>wiki</i> (n)	a type of collaboratively authored website which allows users to add and edit content ²⁷ .

²³ Available at <http://en.wikipedia.org/wiki/Vlog> [accessed 5 September, 2006].

²⁴ Available at <http://www.netlingo.com/lookup.cfm?term=XML> [accessed 5 September 2006].

²⁵ Stone, 2004:237.

²⁶ Walker, 2005.

²⁷ Available at <http://en.wikipedia.org/wiki/WIKI> [accessed 6 September 2006].

4.0 Background information about blogs

4.1 What is a blog?

The term blog is a shortened version of weblog, which is itself a contraction of web log. Although Peter Merholz is credited with coining the term blog in 1999 (Blood, 2002), the first use of weblog is attributed to Jorn Barger in December 1997 (Blood, 2002; OED, 2006). Barger originally used weblog in reference to web pages that logged the web, creating lists of hyperlinks to web sites of interest, which were sometimes accompanied by annotations.

Early blogs were initially link-driven sites which collected, organised and shared “pre-surfed” web sites of interest, often accompanied by “commentary, and personal thoughts and essays” (Blood, 2000). However, with the release in mid-1999 of blogging software, the blogging community expanded beyond its original closed community of web developers and the blogosphere began to change. While early blogs had a “web-at-large” focus, looking outwards for information and acting as a filter to the web, with new easy-to-use blogging software, which required little or no knowledge of programming languages and offered free web-hosting, a new type of blog emerged, the online personal journal, where an individual blogger shared personal thoughts about their immediate world (Blood, 2000).

Herein lies the difficulty in defining a blog, because, as noted by Etches-Johnson (2005:52), “[m]uch like the rest of the internet, a weblog is in fact different things to different people, and that’s what makes defining it so problematic”. Beyond “a web page containing brief, chronologically arranged items of information”, there is still

considerable debate and a lack of consensus about how to define a blog (Clyde, 2004:391).

Walker (2005) provided the following definition for the weblog entry in the *Routledge Encyclopedia of Narrative Theory*:

A weblog, or blog, is a frequently updated website consisting of dated entries arranged in reverse chronological order so that the most recent post appears first. [...] Typically, weblogs are published by individuals and their style is personal and informal. [...] Though weblogs are primarily textual, experimentation with sound, images, and videos has resulted in related genre such as photoblogs, videoblogs, and audioblogs.

This definition encompasses the two consistently agreed-upon elements of blogs: 1) frequent updates, and 2) time-and-date stamped entries published in reverse chronological order (see Crawford, 2001; Thomsen, 2002; Harder and Reichardt, 2003; Goans and Vogel, 2005).

However, Walker's definition is one of the few which does not place restrictions on content or purpose. For example, some commentators segregate blogs by content, such as blawgs, edu-blogs, warblogs and pundit blogs (see Bausch *et al.*, 2002; Stone, 2004; Gratches, 2005), and others delineate blogs by purpose, such as "informational (providing subject-specific information to the reader), personal (a personal diary), [or] informational-personal (a mixture of both)" (Cohen, 2003:50) or "political blogs [...] fan blogs [...] rant blogs [...] business blogs" (Dvorak *et al.*, 2004:372-376).

Walker's definition states that blogs are typically "published by individuals", which is supported by a recent survey of American bloggers in which seven out of ten respondents say that "they are the only author of their main blog" (Lenhart and Fox, 2006:10). However, it does not preclude other blog publishing permutations, such as community, also referred to as collaborative or collective, blogs to which anyone can contribute to a link or comment.

These multi-author blogs allow "a community of people with similar interests to contribute to a collectively beneficial resource" (Schwartz, 2005a), and create "a framework for social networking" (Hourihan, 2002). Although some collaborative blogs, such as Slashdot.com, are moderated by a group of editors, most multiple-person blogs encourage unedited posting. One of the most well known community blogs, MetaFilter.com, states that it "exists to break down the barriers between people, to extend a weblog beyond just one person, and to foster discussion among its members" (MetaFilter, 2006). Cohen (2003) argues that collaborative blogs work better than individually maintained blogs, as a collective blog is able to cope with absence, illness and/or attrition of individual bloggers and is therefore more sustainable over the long term.

Walker (2005) is also one of the few to make reference to non-textual blog developments, such as image, audio and video blogs. Hence, blogs are no longer just lists of links with short annotations, they may now take many different forms, such as "a diary, a news service, a collection of links to Internet resources, a series of book reviews, reports of activity on a project, the journal of an expedition, a photographic record of a building project, or any number of other forms" (Clyde, 2004:391).

Therefore, Walker's definition encompasses the key elements of blogs, that is, the frequent updates and the reverse chronological posting of entries, and is sufficiently broad to allow for the inevitable future expansion and further diversification of the global blogosphere.

4.2 Blogging Software²⁸

In the early years, blogs were maintained only by people with knowledge of HTML, the programming language used to code web pages, as all blog entries, typically referred to as posts, needed to be manually coded using HTML (Blood, 2002). However the release of freely-available, user-friendly blogging software by Pitas, Blogger, Velocinews and Groksoup in mid-1999 significantly changed the weblog environment (Yang, 2006).

This new type of blogging software allowed anyone to create and maintain a blog without any knowledge or understanding of HTML. This new technology was so simple that it enabled anyone "to edit a web page without worrying about programming or design issues" (Carver, 2003:30). As Blood (2002:5) suggests, "anyone who could type and had access to the World Wide Web could create a weblog". Bloggers could choose a pre-coded layout template, create blog posts by typing into a blank text box and add text formatting and/or hyperlinks with the press of a button. Blogs were no longer just the domain of web developers and computer programmers, the push-button publishing revolution had begun.

Since 2000 there has been substantial growth in the number of blogging software packages available, ranging from free or relatively inexpensive packages to

²⁸ See Appendix III for URLs of blogging software mentioned in this section.

feature-rich commercial products. Most bloggers begin with a free hosted blogging service, such as Blogger, where a new blog can be created within a matter of minutes and blog maintenance is “fast, easy and usually free” (Fitcher and Cervone, 2005:67). However, blog software differs greatly in terms of functionality, and establishing which features are critical to the blog may ultimately determine which type of blogging software is selected (Fitcher and Cervone, 2005).

Deval (2003) outlines two main categories of blogging software, 1) end-user blog software and 2) self-managed blog software. End-user software is geared towards ease-of-use and simplicity for the user, and is typically included as part of a fully-hosted blog service. Examples of this type of blog software include Blogger, Blog-City, Radio Userland and LiveJournal. Despite its straightforwardness, a hosted blogging service may not be suitable in many cases, as it “can become overloaded, go offline unexpectedly, or, in the worst case, simply cease to exist” (Fitcher and Cervone, 2005:67). In contrast, self-managed blog software is geared towards more tech-savvy blog users who have some understanding of HTML and sufficient technological know-how to set up and install blogging software locally. This type of blog software allows for the customisation of blogs, usually offers greater functionality and permits manual HTML coding to create uniquely designed blogs. Examples of this type of blog software include Manila, Blossom, WordPress and Movable Type. While this gives the blogger independence from a hosting service, it does require some time commitment for on-going software maintenance (Fitcher and Cervone, 2005).

There has also been ongoing growth in the area of open source blogging options, which are self-managed, but allow for even greater customisation. This type of blog option is usually part of a larger content management system (CMS) and requires

significantly more technological capability on the part of the blogger. Examples of this type of blogging software include Greymatter, Zope, Slashcode and Drupal.

Fitcher and Cervone (2005) identify two other blog publishing possibilities, which are a compromise between the fully-hosted and self-managed options outlined above. Bloggers can install a blog software package, such as CityDesk, Tinderbox and iBlog, onto a desktop computer, and then create and edit blog posts before uploading them to a web server via FTP. Alternatively, bloggers can choose to publish their blog entries using an advanced feature offered by some hosted blogging services, whereby blog posts are created and maintained via the hosted blog service, and then transferred to a local server by FTP, allowing blog pages to be kept within a particular domain name.

4.3 The Global Blogosphere

The blogosphere is a term most commonly used to describe the “sum total of all blogs” (Stone, 2004:230; Sifry, 2006a). From small beginnings, the blogosphere has developed into an enormous global online community.

Although the term weblog first appeared in 1997, Blood (2002) argues that many early web sites, for example, Mosaic’s *What’s New* page²⁹, *Links from the Underground*³⁰, *News, Pointers & Commentary*³¹ and *The Obvious Filter*³² were in fact prototypical blogs, providing a reverse chronological list of hyperlinks accompanied by short annotations. Nonetheless, there were relatively few blogs in early 1999 when Garrett created the first “page of only weblogs”, which listed 23 weblogs (see Blood,

²⁹ Mosaic’s *What’s New* page ran from June 1993 to June 1996, and was updated daily with links to a variety of new and interesting web pages. (Blood, 2002:3)

³⁰ Web page created by Justin Hall in 1994 (Bausch, Haughey and Hourihan. 2002:9).

³¹ Web page created by Steve Bogart in February 1997, later renamed *Now This* (Blood, 2002:3).

³² Web page created by Michael Sippey in May 1996, later renamed *Filtered for Purity* (Blood, 2002:3).

2000). This list expanded to approximately 300 blogs by October 2000, at which point the list ceased to be maintained (Garrett, 2000). Although the majority of these blogs listed were published in English and originated from the United States of America, blogs from other countries, including Canada, France and the Netherlands, and blogs published in other languages, such as French and Dutch, were also included.

Since then, the blogosphere has grown exponentially. As of April 25, 2006, Technorati³³, a well known blog search engine, was tracking 36,500,000 blogs worldwide (see Sifry, 2006a; 2006b). Less than two months later, on 31 July, 2006, Technorati had tracked its 50,000,000th blog (see Sifry 2006c). According to Sifry (2006a; 2006b; 2006c), the blogosphere, as tracked by Technorati, consistently doubles approximately every six months and grows at a rate of approximately 75,000 new blogs each day. While Sifry (2006c) acknowledges that some of these new blogs are probably splogs, the blogosphere is still growing at a phenomenal rate. Kline and Burstein (2005) predict that the blogosphere will continue to expand, especially given the growing number of knowledge workers and the increasing corporatisation and globalisation of blogs.

In April 2005, Technorati began to track the primary language used to post entries for each blog, using automated language analysis software, in an attempt to glean information about the growing globalisation of the blogosphere. While Sifry (2006b) acknowledges some limitations in the data, such as poor indexing of the major blogging services in some countries which may significantly under-represent posts in languages such as French and Korean, the data clearly indicates that the blogosphere is indeed multilingual. Since November 2005, English and Japanese have alternated as the majority language of the blog posts (Sifry, 2006b; Sifry, 2006c), with Chinese consistently placed

³³ Available at <http://www.technorati.com/>

third. Technorati has incorporated this language data into its blog search engine facilities and allows web users to search for blogs in a variety of languages, including Arabic, Chinese, Farsi, Italian, Japanese, German, Greek, Hebrew, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish and Vietnamese.

Blogs have facilitated cost-effective and community-controlled publishing in minority languages, such as Welsh, and have also enabled many people, for whom free speech is not always a given, the opportunity to express themselves (see Alavi, 2005). In the 1990s, many developing countries found that mobile phone technology could develop without a robust landline infrastructure, and many of these same countries are now discovering that a diverse blogosphere can exist without a traditional and free media environment (see Kline and Burstein, 2005). Just as list-servs, newsgroups, bulletin boards and email facilitated discussion between geographically disparate individuals in the early days of the World Wide Web, blogs enable connections between people from the same language community, regardless of geography. To illustrate this, a how-to guide for creating a blog in Persian, published online in 2001 by an Iranian man living in Canada, resulted in more than 100,000 Persian language blogs being created worldwide by the end of 2003 (Gillmor, 2005).

Kline and Burstein (2005:xx) argue that blogs have played a key role in the evolution of the web towards the “multimedia, always-on, highly interactive, highly personalized, next-generation Web” that was promised in the early 1990s. Tim Berners-Lee, credited with creating the first website in 1991, acknowledges that blogs are closer to the “reader-writer” web that he envisaged when the web first emerged, whereby anyone with access to the internet could participate in the web by using it as a creative medium, without the complexity of needing to know about programming languages and being able

to write using computer codes (see Lawson, 2005). Chad and Miller (2005:10) reiterate this concept of blogs and bloggers contributing to the “read/write web”, stating that “a reader of a blog or a wiki is provided with tools to add a comment or even, in the case of the wiki, to edit the content.”

Jacobsen Harris (2005:34) reflects that, especially for teenagers coming of age online, new developments in information and communication technologies (ICTs), such as blogs, wikis and instant messaging, are creating social information spaces which “are designed as much for the reciprocal sharing of information as they are for seeking and disseminating information.” In 2005, a survey conducted by the Pew Internet and American Life Project, reported that 57% of online teens had created content for the internet, that is, participating in at least one of the following activities, “create a blog; create a personal webpage; create a webpage for school, a friend, or an organization; share original content they created themselves online; or remix content found online into a new creation” (Lenhart and Madden, 2005:1). Surveys conducted by the Pew Internet & American Life Project³⁴ indicate that American bloggers are evenly split along gender lines, with more than half under the age of 30, and are more racially diverse than overall internet users (Lenhart and Fox, 2006).

Although, as outlined by Sifry (2006b, 2006c), the demographics of the global blogosphere are in a constant state of flux, given the increasing incorporation of social software, such as instant messaging and blogs, into the lives of upcoming generations, it appears that the global blogosphere will continue to expand and morph in new directions.

³⁴ Available at <http://www.pewinternet.org/index.asp>

5.0 Literature review

5.1 General Literature

Most of the early articles and essays about weblogs appeared online, usually written by bloggers and/or posted on a blog (see Barrett, 1999; Blood, 2000). Although a collection of these early online essays has since been published (see Rodzilla, 2002), it wasn't until 2002 that printed material about blogs and blogging began to appear. Most of these early publications consisted of 'how-to' books which explained blogging software, provided step-by-step instructions for setting up a blog and described how to customise blogs to gain maximum online exposure. Again, this material was often written by bloggers (see Bausch *et al.*, 2002; Blood, 2002; Doctorow *et al.*, 2002; Stauffer, 2002; Stone, 2002).

While 'how-to' publications continue to appear, they are now more likely to have a narrower focus, for example, outlining a specific type of blogging software (see Castro, 2005; Murray and Torres, 2006), how to use blogs effectively as a marketing tool (see Wright, 2005; Well, 2006; Wibbels, 2006), or how to maximise blog use in a particular business environment, such as real estate (see Nacht and Chaney, 2006).

There has been a shift in the general literature in recent years away from the technical aspects of blogging to discussion about blogs and bloggers, with articles appearing in many American mainstream media publications, including *Fortune* (see Kirkpatrick and Roth, 2004), *New York Times Magazine* (see Nussbaum, 2004) and *Time* (see Grossman and Hamilton, 2004; Sullivan, 2004). Other topics have also since emerged in the general literature, including discussions about the effect of blogs in the field of business (see Byron and Broback, 2006; Scoble and Israel, 2006), potential uses

of blogs in education (see Warlick, 2005; Richardson, 2006) and analysis of the use of blogs in political campaigns (see Ackland, 2005; Gibson and McAllister, 2005; Trammell, 2005; Williams *et al.*, 2005). A number of other publications examine the impacts of blogs on journalism, publishing and society (see Bruns, 2005; Gillmor, 2005; Hewitt, 2005; Kline and Burstein, 2005). Articles about the relevance of blogs for business have also appeared in several key New Zealand business publications (see Baker, 2005; Brown, 2005; Gray, 2005), and there has been an analysis of impact of blogs on New Zealand's political arena in relation to the 2005 New Zealand general election (see Hopkins and Matheson, 2005).

5.2 Library Literature

Articles relating to blogging in the library sector began to appear in professional interest and scholarly publications in 2001, advocating the usefulness of blogs for librarians and/or libraries, and highlighting potentially useful librarian-created blogs (see Crawford, 2001; Curling, 2001; Hane, 2001). The majority of articles published over the next few years continued to promote the use of blogs by libraries (see Balas, 2003; Berger, 2003; Carver, 2003; Fitcher, 2003; Huwe, 2003; Oatman, 2003; Stone, 2003; Weaver, 2003). However, new topics also emerged, such as the discussion of the many different ways in which blogs could be used in a library context (see Thomsen, 2002; Harder and Reichardt, 2003; Stone, 2003; Tuining, 2003) and detailed reports of setting up and utilising blogs in a library environment (see Goans and Vogel, 2003; Sennema, 2003).

As one of the earliest advocates of blogs in the library sector, Hane (2001) believed that “blogs are natural for librarians”, and this sentiment is echoed in recent library literature, “[...] librarians and blogs are a natural combination” (Kenny and

Stephens, 2005:38). The library literature continues many of its earlier themes: why blogs are useful for libraries and/or librarians (see Kenney and Stephens, 2005; Schwartz, 2005a), ways in which blogs can be used in a library environment to enhance services for users (see Cohen, 2004; Bhatt, 2005; Etches-Johnson, 2005; Fitcher and Cervone, 2005; Huwe, 2006; Kuyzk, 2006), experiences of setting up a library blog (see Munoz, 2004; Goans and Vogel, 2005; Blair and Cranston, 2006) and useful blogs for librarians (see Maxymuk, 2005). Nevertheless, as the blogosphere matures, new topics are again emerging in the library literature, such as the impact of blogs on collection management (see Moller and Rupp 2005), how to be an ethical librarian blogger (see Schneider, 2005) and advice on the use and management of blogs as internal communication tools (see Fitcher, 2005; Guenther, 2005; Singer Gordon and Stephens, 2006).

There are, as stated by Goans and Vogel (2005:10-11), important distinctions between librarian blogs and library blogs, that is, “librarian blogs are owned and managed by librarians, but may have little or no connection to any library organization”, whereas a library blog is “managed by one or more librarians within the organization” and is used to “deliver news and information relevant to patrons at the library instead of a larger community of librarians and information professionals.”

As Clyde (2004a) notes, while blogging gained the early attention of the library and information science community and blogging by librarians subsequently grew in popularity, library blogs did not appear to achieve the same level of growth or interest. Kline and Burstein (2005:102) report that “business-oriented blogging is still in its infancy, with the vast majority of business still grappling with how and to what end to adopt the new medium”. This appears to also be true in the library and information sector, where libraries are still coming to grips with using blogs in a variety of ways to

communicate with their user communities and with their professional communities, despite blog technology being packaged in “easily implemented tools” (Etches-Johnson, 2005:42). In developing blogs for Georgia State University (GSU), Goans and Vogel (2003:21–22) found that, “despite the mainstream media coverage [of blogs and blogging] in places like *Newsweek*, *The Washington Post*, *The New York Times*, and articles in the library literature that advocate and promote the use of blogging in libraries, few libraries are actually doing so.”

Weblogs and Libraries (Clyde, 2004a) was published in 2004, and provided an overview of blogging history and blog software, as well as providing strategies for searching for blogs, especially in the field of library and information science. This publication also contains an in-depth discussion of management issues involved with the use of blogs in a library environment, including planning, budgeting, audience identification, implementation, maintenance, promotion and evaluation of the library blog. Clyde’s 2003 research into library blogs is also presented in this publication.

In late 2003, Clyde investigated the use of blogs by libraries (see Clyde, 2004a; 2004b; 2004c). A total of fifty-seven library blogs were located, through a variety of web search tools, with the majority of blogs associated with public or academic libraries in the United States of America. Clyde (2004b:188) determined that the most library blogs were updated infrequently and irregularly, which goes against one of the main strengths of blogs, that is, the “ability to draw attention to current information”. Most of the library blogs were designed for “one-way communication between library staff and users”, with only a quarter of library blogs providing interactive features, such as allowing user comments, and even fewer had an RSS feed, which would have enabled users to receive up-to-date information from the library blog (Clyde, 2004b:188). There was also a

distinct lack of integration of the library blog with other library services, with few library blogs providing links to the library web site, catalogue and/or reference services (Clyde, 2004b). Overall, Clyde (2004c) concluded that the library community appeared to be unenthusiastic about library blogs, and that the majority of the libraries using blogs did not appear to be using this medium of communication particularly well.

While there has been no further research into the use of blogs by libraries since Clyde (2004a), articles in the professional library literature continue to suggest ways in which libraries can use blogs, for example, library e-services such as reader advisory (see Kuzyk, 2006), promotion of new and existing library resources (see Bhatt, 2005) and announcing upcoming events (see Bhatt, 2005).

In the meantime however, there has been a shift in the research focus about blogs and blogging in the library sector, moving to investigate the state of the librarian blogosphere in an attempt to determine how and why librarians are using and/or creating blogs (see Bar-Ilan, 2005; Crawford, 2005; Farkas, 2005; Laning *et al.*, 2005; Weibrands, 2006). Much of the research pertaining to librarian bloggers is conducted through informal online surveys, which are often posted on a librarian blog (see Farkas, 2005; Weibrands, 2006). It appears that many of the librarian bloggers who complete these online surveys do so as a result of reading other blog posts which then link to the survey blog post; therefore the population sample may not accurately represent the overall librarian blogosphere.

Given that the global blogosphere has expanded and evolved dramatically over past few years (see Sifry, 2006a; 2006b; 2006c), it is highly likely that both the librarian and library blogospheres have also altered significantly since the last investigation into the

use of blogs by libraries. This research study investigates the state of the library blogosphere in 2006, to identify current library blog demographics and determine how library blogs are being used in 2006, and how this has potentially changed since Clyde's 2003 research.

6.0 Methodology

In many ways, the research study replicated the methodology used in Clyde's 2003 study of library weblogs (see Clyde, 2004a), that is, library blogs were located using a variety of existing online resources as well as through different online search techniques. The located library blogs were subsequently examined using content analysis to determine the demographic features, and the purpose(s) and use(s) of library blogs.

There were however, some changes with regards to the sample population. An initial investigation of online listings of blogs indicated that there was a significant amount of growth in the area of library blogs, including collective blogs maintained by librarians from different institutions, blogs created by professional associations and blogs used as internal communication tools within libraries. To create a manageable small-scale research project, the researcher elected to narrow the focus of this research project to include only library blogs created by a single organisation or institution and which were used for external communication with library users, therefore excluding any blogs used for internal library communication, as well as cross-institutional library blogs and blogs used by library associations in the capacity of professional communication with library and information specialists. The researcher also limited the investigation to library blogs published in English, which in turn means that the results may not be generalisable across the multi-lingual global library blogosphere.

Reliability of data coding is typically one of the strengths of content analysis, and in the instance of using human coders, is usually achieved through synchronous training of multiple coders to ensure consistency and reliability of coding between different people. However, as this was a small-scale research project, only one person

conducted the coding for the content analysis, and this is acknowledged as a potential weakness of the research

6.1 Delimitations and Limitations of the research study

6.1.1 Delimitations

1. Library blogs must be externally available, that is publicly accessible via the World Wide Web.
2. Library blogs must be published in English.
3. Library blogs must be associated with a single organisation or institution.
4. Library blogs must be identifiable through online search techniques.
5. Only active library blogs will be included for content analysis.
6. Active library blogs will be determined to:
 - a. Have at least 1 post since May 1, 2006; *and*
 - i. Have at least 6 posts in 2006, if they were created before 31 December, 2005; *or*
 - ii. Have at least 2 posts in 2006, if they were created after 1 January, 2006.
7. Only the front page of active library blogs will be coded for analysis.

6.1.2 Limitations

1. Library blogs must be published in English.
2. The population of library blogs published in English may not be generalisable across the population of library blogs in other languages.

3. In limiting analysis to externally available blogs, the research may not reflect overall use of blogs in a library setting.
4. Some libraries may have multiple blogs, which may over-inflate the total number of library blogs.
5. A printed page of the blog does not reflect some interactive features, such as 'drop-down' or 'hover-over' menus, which therefore may not reflect some library blog features.
6. A printed page may potentially exclude information which can be found via a link on the library blog front page.
7. One person has undertaken the data coding.

6.2 Sample Population

6.2.1 Location of blogs³⁵

Several online listings of library and librarian blogs, including *Libdex*, *BlogBib* and *dmoz Open Project Directory*, were regularly referred to the library literature (see Crawford, 2001; Maxymuk, 2005), as was the blogroll of *blogwithoutalibrary.net* (see Oatman, 2003), where Etches-Johnson maintained a growing list of links to library blogs, which eventually resulted in the launch of *The Blogging Libraries Wiki* in April 2006.

Libdex and *BlogBib* included listings for both library and librarian blogs, whereas *dmoz Open Project Directory* maintained a separate list for organisational library blogs. The most comprehensive listing of library blogs was *The Blogging Libraries Wiki*, where blogs were separated by library type (academic, public, school and special), along with sections for internal library communication and library association blogs.

³⁵ See Appendix I for URLs of online resources and search engines discussed in this section.

In June 2006, *The Blogging Libraries Wiki* was chosen as a starting point to investigate library blogs as it had the most extensive list of blogging libraries and listed over three times as many libraries as the next longest online list, *Libdex*. Beginning with the four relevant library type sections from *The Blogging Libraries Wiki*, all listed blog URLs were checked using a Firefox (version 1.5.0.6) web browser. Upon determining that the listed URL provided access to a library blog published in English, the URL was bookmarked and organised into a folder relating to its location, for example, The Blogging Libraries Wiki – Academic Libraries.

Once *The Blogging Libraries Wiki* had been thoroughly examined, blogs from the three other online listings, *Libdex*, *BlogBib* and *dmoz Open Project Directory*, were subsequently investigated. In the majority of cases, these online listings provided access to the same library blogs from *The Blogging Libraries Wiki*.

Once the blogs from these four online listings had been thoroughly examined, searches were undertaken using the advanced search option on Google Blog Search, Google.com and country-specific Google search pages, including Australia, Canada, England, Ireland, New Zealand and South Africa. The first 100 results of each search were examined to determine whether any new library blogs had been located. The advanced search option allowed the researcher to limit the language posts to those published in English, as well as including and/or excluding certain terms from the search. The following combinations of search terms were used:

- (library AND blog)
- (library AND blog) NOT librarian
- (special AND library AND blog) NOT librarian

- (research AND library AND blog) NOT librarian
- (school AND library AND blog) NOT librarian
- (academic AND library AND blog) NOT librarian
- (public AND library AND blog) NOT librarian

The researcher then located other blog directories and blog search engines using Yahoo!³⁶ and Google³⁷ directory listings for library weblogs, including AustralianBlogs.com.au, Blogflux, BlogSearchEngine, Blogwise, EatonWeb Portal, Feedster, GetBlogs, Gigablast, Globe of Blogs and Technorati.

A Microsoft Excel spreadsheet was used to record details of the online strategy used to locate the library blog, the relevant URL, the date of location, the date of the last post and the country of origin.

Determining the country of origin was not always straightforward. Although many library blogs did indicate at least one of the following features, a physical address, the name of the town or city, the state or region they were located in, few library blogs indicated the actual country. Although the country was often able to be determined through linked web pages, such as the library website, in some instances, further searching using a Google search engine was undertaken to determine the true geographical location of the library.

³⁶ Yahoo! Search Directory > Computer and Internet > Internet > World Wide Web > Weblogs > Directories. Available at http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Weblogs/Directories/ [accessed 10 April, 2006].

³⁷ Google Directory > Reference > Libraries > Library and Information Science > Weblogs > Organizational Weblogs. Available at http://directory.google.com/Top/Reference/Libraries/Library_and_Information_Science/Weblogs/Organizational_Weblogs/ [accessed 10 April, 2006].

There are limitations associated with locating library blogs through online search techniques such as directory listings and blog search engines. For example, new library blogs may not yet be listed in online directories, nor currently indexed by blog search engines. A new library blog may also be maintained by someone who is a relative newcomer to the world of blogging, and as such, the metadata and/or tags associated with the library blog may not yet be sufficiently accurate to be appropriately indexed. Some library blogs may not yet generate enough traffic to be returned in the first 100 relevancy-ranked results of an online search.

Therefore this research represents an analysis of those library blogs published in English which have sufficient online presence to be listed in online resources and/or located through online search techniques.

6.2.2 Removal of duplicate listings and non-library blogs

Once all online search sources had been thoroughly investigated, the list of library blogs was cross-checked to remove any blogs which had inadvertently been duplicated. Despite attempts to avoid listing duplicate blogs, one library blog had been listed twice and was subsequently removed with this cross-checking.

Several other non-library blogs were also inadvertently included in the final list of located blogs. Upon closer investigation of the 'about this blog' sections, the list of contributors and/or the content of the blog posts, seventeen blogs were removed from the final list. The reasons for the removal of these blogs included: use as an internal communication tools, blog originating from a library association, cross-organisational blog, or part of a communication-sharing tool relating to a regional library conference.

6.2.3 Clarification of library type

The segregation of blogs by library type reflects the separate listings employed by *The Blogging Libraries Wiki*. Therefore, library types are demarcated as follows:

- an academic library refers to a tertiary educational institution library;
- a public library relates to a library which is accessible to the public and is funded by public monies;
- a school library refers to a primary or secondary educational institution library; and
- a special library refers to any non-academic, non-public or non-school library.

The national libraries of two countries, Scotland and Singapore, were found to be using blogs. These library blogs were classified as special libraries to reflect their unique position as an overarching national library facility.

Regional and/or state libraries, such as the Idaho State Library, were classified as public libraries to reflect their more common and localised utilisation as a public library facility.

6.2.4 Re-categorisation of library blogs

Three academic library blogs were found to be incorrectly categorised, two were listed as special libraries and one as a public library. These details were subsequently changed to accurately reflect the type of library which had created the library blog.

6.2.5 Removal of inactive and discontinued blogs

As the list of all located library blogs was compiled, it became apparent that a significant number of blogs were no longer actively being maintained. While some were several years out of date, the abandonment of others was more recent, having had little or no activity since late 2005 or early 2006.

Rather than include these inactive blogs in the detailed content analysis of library blogs, which could potentially skew the results, a decision was made to limit the analysis to active blogs, which were determined as follows:

- At least 1 post since 1 May 2006, *and*
- At least 6 posts in 2006, if created before 31 December, 2005; *or*
- At least 2 posts in 2006, if created after 1 January, 2006.

The selection of 1 May, 2006 as a cut-off point for the most recent post was determined after consideration of several factors. As there is little research into the blogging habits of corporate or institutional bloggers, information about the frequency of posting by personal bloggers was used as a guide to determine what may potentially be an accepted level of posting frequency. Lenhart and Fox (2006:20-21) concluded that almost fifty percent of personal bloggers post at least “every few weeks”, although this is also intertwined with a certain level of creative stimulation, as seventy percent of personal bloggers post only “when inspiration strikes”. Therefore, it appears that one blog post every four weeks may be an acceptable mid-range for determining recent blog posting activity. It is worth noting however that, in terms of an institutional blog, the frequency of posting could potentially depend heavily on the key purpose(s) and/or use(s) of the blog as to whether a similar pattern of posting when inspiration strikes is also followed.

Another key consideration was the time of year that this research study was carried out. Although this research was conducted from New Zealand, the sample population included library blogs from many other countries, including a large number of northern hemisphere educational institutions. In many instances, primary and secondary schools and tertiary institutions may not be open over the summer holiday break, which may range from late June to early September, or these institutions may choose not to create blog content in the final weeks of the school year, due to other commitments such as examinations and graduation ceremonies.

Therefore, extending the period of when the most recent blog entry was posted to 1 May, 2006 permitted a potentially larger sample population of active blogs to be included and also allowed for unknown external factors, such as closure over the summer vacation period, to be taken into account.

Determining the number of blog posts in 2006 and whether the library blog had been established prior to 31 December, 2005 was reasonably straightforward. Blogs typically display at least their most recent post when the front page is loaded into the web browser. While there is no definitive rule on how many blog posts are displayed, it is common for at least the current month's postings to be displayed, and postings from previous months are also often included, especially if the current month's postings are few in number. It was relatively easy to determine whether a library blog created prior to 31 December, 2005 had at least six posts, as there were typically at least six posts shown on the front page on most library blogs established prior to 31 December, 2005.

Blog archives are also commonly listed in a sidebar, and are typically listed by month/year, and this information was helpful in determining whether a blog had been in

existence prior to 31 December, 2005. In the event that it was unclear that a library blog met the minimum requirements to be declared active, the researcher checked the online blog archives for the previous months to ensure that minimum requirements were met. This was necessary in a minimum of cases and resulted in most of these library blogs being declared inactive.

A distinction was also made between library blogs which had been abandoned, that is, judged to be inactive due to a lack of posting, and library blogs which had been consciously discontinued, that is, the final blog post clearly indicated that the blog would not longer be actively maintained and usually included a reason for its discontinuation. Few library blogs were actively discontinued; most had simply ceased to have further content added.

6.2.6 Researcher anonymity

The library blogging community was not alerted to the fact that the researcher was investigating library blogs. The researcher did not widely publicise the research topic, make direct contact with library blog creators, or leave any overt indications that the blog had been visited and subsequently investigated as part of a research study. This ‘invisibility’ on the part of the researcher should be viewed as a strength of the research.

6.3 Method of Data Analysis

6.3.1 Content Analysis

In keeping with the original study upon which the research was based (see Clyde, 2004a), content analysis was selected as the method of data analysis. Clyde had used this method of data analysis in previous research investigating library web pages (see Clyde, 1996), and cites a number of subsequent studies which also used content analysis

when examining web page content (see Bates and Lu, 1997; Cano and Prentice, 1998; Haines, 1999).

McMillan (2000) conducted a meta-analysis of a number of different studies, including Clyde (1996), which used content analysis to investigate different aspects of the World Wide Web and concluded that content analysis was an appropriate technique for studying the online environment. McMillan (2000:81) cites Krippendorff (1980), who defines content analysis as “a research technique for making replicable and valid inferences from data to their context”, and outlines four primary advantages of content analysis: “it is unobtrusive, it accepts unstructured material, it is context sensitive [...] and it can cope with large volumes of data”. McMillan (2000:81) argues that these advantages apply equally well to the “dynamic environment” of the World Wide Web as they do to traditional media such as newspapers.

The use of content analysis involves two key areas of measurement – units of coding for context and content. The “context unit is the body of material surrounding the [content] coding unit” and the content coding units are the “smallest segment of content counted and scored in the content analysis” (McMillan, 2000:82).

In this research project, the context unit was determined to be a print-out of the front page of the library blog. The content units were determined to be any individual feature present on the front page of the library blog, which was tallied for quantifiable counts used to determine library blog demographics, and any words and/or phrases which indicated the purpose(s) and/or use(s) of the library blog.

The front page of the library blog was selected as the context unit. Limiting the context unit to the front page of the blog provided a more equal basis for comparison between library blogs, rather than comparing overall size of library blogs, or analysing all features on all pages of the library blog. As some library blogs may have been established for a number of years and the inclusion and subsequent analysis of all library blog pages may have biased the results in favour of long-established library blogs.

The researcher undertook emergent data coding, that is, coding categories were “established following some preliminary examination of the data”, as opposed to a priori coding, where categories are established prior to the analysis, based on a particular theory (Stemler, 2001).

However, as this was a small-scale individual research project undertaken by a post-graduate student in the field of library and information studies, it was not feasible to have multiple coders. As Kassarian (1977:13) states, a “researcher’s subjectivity must be minimized to obtain a systematic, objective description of the communication content” and the issue of reliability is therefore “paramount”. Material for this research project was coded by an individual, as opposed to multiple researchers; therefore it is unable to be statistically tested for inter-coder reliability. Nonetheless, significant effort was undertaken to ensure that any potential subjectivity in the coded results was minimised. The researcher acknowledges that the use of a single coder is a limitation of this project.

In an attempt to provide some level of consistency and objectivity in data coding, the researcher undertook analysis of six library blogs prior to data coding of all library blogs. Two examples of well-established library blogs, as indicated in the library literature (see Goans and Vogel, 2003; Goans and Vogel, 2005; Kenney, 2005), were

selected from the list of active blogs, that is, *Library News* from Ann Arbor District Library (AADL) and *Library News* from Georgia State University (GSU), as well as four other active library blogs randomly selected from each different type of library, *First Reading* from the Hawaii Legislative Reference Bureau Library, *Library News* from Whippany Park High School, *What's New!* from the University of Richmond and *Katonah Village Library Blog*³⁸. These six library blogs were analysed in terms of features and purpose(s), with results recorded in a spreadsheet. The features and blog purpose(s) were compared to ensure that they were being coded in similar ways. While the resulting list of features from this material, along with the selective features listed by Clyde (2004:95), was not used as a basis in the actual data coding, it did provide the researcher with an initial understanding of potential features to be identified.

Although Denscombe (2003:222) believes that content analysis is not a valuable tool when dealing with “subtle communication messages”, this research project dealt primarily with quantifiable data, noting the absence/presence of particular features, and the researcher therefore believes that the resulting data is still of sufficient value to be able to draw valid inferences.

6.3.2 Print-out of blog front page

The context coding unit for analysis was the front page of the library blog. In July 2006, the front pages of all active library blogs were printed out. However, several issues arose and the resulting printing process was not as straightforward as it would have first appeared.

³⁸ See Appendix II for relevant library blog URLs.

Each library blog front page was previewed using the print preview option in the Firefox web browser. In some instances, the preview was blank, indicating that the library blog was unable to be printed out. Alternatively, the print-out option occasionally displayed a significantly different layout of a particular blog, especially in relation to features such as side bars, which were often printed out at the end of the blog content, rather than displayed alongside the content.

Therefore, when the print preview indicated that the print-out would differ from the onscreen display, the researcher checked to ensure all details contained within sidebars, headers and footers would be included in the altered print-out version. If it was found that the print-out would not include these details, or the print preview indicated a blank print-out, screenshots were taken of the library blog displayed in the Firefox web browser and were subsequently previewed and printed using the programme Paint. Sufficient screenshots were included to ensure that all side bar information, as well as at least two posts and sufficient footer information, that is, information from the bottom section of the blog, were included.

While the problem of print-outs differing from the on-screen display is not especially problematic for most creators of library blogs, as blogs are intended to be read online rather than printed out, this part of the research process did prove time-consuming for the researcher, to sufficiently cross-check information and ensure that the print-outs accurately represented the information contained within the library blog.

Another challenge for the researcher was the length of the print-out. In many cases, the print preview indicated that the total number of printed pages would be in excess of ten pages, with one print preview indicating a massive two hundred and thirty

four pages. Hence a decision was made to limit the print-out length. Where the print preview indicated a print-out in excess of ten pages, the print-out was limited to the first five printed pages or two posts (whichever was greatest), as well as the final two printed pages of the blog, to again ensure that any footer information was included for analysis. The print-out also needed to include all side bar information. In a small number of instances more than the first five pages were required to be printed to ensure that all side bar information was sufficiently captured.

In two instances, despite rigorous comparison between the print preview and the on-screen library blog, the print-out differed significantly from both of these versions. These two blogs were then re-captured using screenshots and printed using the Paint programme.

A total of 51 blogs, that is, all of the library blogs created by special and school libraries, were printed over 5th, 6th and 7th July, 2006. Due to a substantial technical malfunction with the printing technology, the remaining 406 library blogs were printed thirteen days later, over 20th and 21st July, 2006. This time delay may be viewed as a potential limitation to the interpretation of results.

The researcher acknowledges limitations in the use of a printed representation of a library blog, most significantly the 'invisibility' of interactive features, such as drop-down and/or hover-over menu display options, which are not identifiable in a printed version. The 'invisibility' of features which may have been listed in drop-down or hover-over menus may result in the under-representation of certain library blog features.

6.4 Coding of data

In August 2006, the researcher analysed each print-out of the 457 library blogs to create a list of features. The researcher did not begin with a list, rather the list was created with the analysis of the first library blog and new features were added to this existing list with subsequent analysis of library blogs, in accordance with emergent data coding theory. If new features were added to the list during the analysis of a library blog, then upon completion of coding that particular library blog, all previously coded library blogs were re-checked for presence of the new feature(s).

Once all library blogs had been coded, the list of features was cross-checked to ensure that no feature had been listed in more than one way. Data was again recorded using an Excel Spreadsheet.

6.5 Determination of purpose(s) and/or use(s)

The purpose(s) and/or use(s) of each library blog was determined through content analysis of the following: the title of the blog, the sub-heading of the blog, content of the two most recent posts, titles of previous posts, and/or information listed in the 'about this blog' section, where this was printed in full on the front page of the library blog.

The researcher acknowledges that not all library blogs contained all or some of this information, which is therefore a limitation of the research. However, as the front page of the library blog was defined as the context coding unit, only information available in this context was able to be used to determine the purpose(s) and use(s) of a library blog.

6.6 Collation of data

Information gathered from the content analysis was grouped with similar types of information. For example, information relating to library demographics, such as library type and geographical location details, was grouped together in the spreadsheet. Blog features were also grouped with similar types of features, for example, external information links, different online resources and blogroll information were grouped with features which offered similar types of information. This grouping of features by type was an attempt to limit any recording of the same feature in a different manner.

Data was collated using in an Excel spreadsheet, with separate worksheets for information relating to each library type. Total numbers relating to the occurrence of each feature were later collated in a single spreadsheet and information was then extracted from this data about overall library demographics, blog features, and blog purpose(s) and use(s).

Although the results of the data coding were initially separated by library type, the total sample population numbers for special and school libraries are significantly lower than those for academic and public libraries and it is therefore difficult to make comparable inferences between the four library types. Hence, there is little discussion about the differences of blog features and blog purpose(s) and use(s) between each library type.

7.0 Results and Discussion

7.1 Demographics

7.1.1 Total number of library blogs

Table 1. Active vs Inactive blogs

	Total	Inactive	%	Active	%
Blogs located	603	146	24.21	457	75.79
Institutions located	389	96	24.68	293	75.32

Almost a quarter of all located library blogs (24.21%) were deemed inactive, with insufficient activity in 2006. Of the 146 inactive blogs, 5 were labelled as discontinued blogs, meaning that the final blog post clearly indicated that a particular library blog would not longer be actively maintained, but would remain online as a web resource. The reason for discontinuation of these library blogs was that the individual blogger maintaining the library blog was either changing roles or ceasing employment at a particular institution.

It is possible that a proportion of library blogs considered to be inactive for the purposes of this research study may in fact be 'dormant', that is, not currently maintained due to unforeseen circumstances, such as staff illness or absence, or an intentional period of inactivity, such as an elongated summer vacation for staff and/or students at an educational institution. Nevertheless, a substantial number of library blogs with long periods of inactivity, for example, no new content since 2004, remain accessible online. It appears that for many libraries, blogging has not been a successful, ongoing endeavour.

7.1.2 Location of library blogs

Table 2. Successful strategies for finding library blogs

	Total	%	Academic	Public	Special	School
Blogging Libraries Wiki	414	90.59	195	174	27	18
Google Blog Search	14	3.06	7	6		1
Google.co.nz	7	1.53	6	1		
Google.com.au	6	1.31	2	2		2
Libdex	5	1.09	4		1	
Google.ca	4	0.88	2	2		
AustralianBlogs.com.au	3	0.66	1	1		1
dmoz Open Project Directory	3	0.66	1	2		
Google.co.uk	1	0.22			1	
Total	457		218	188	29	22

The most comprehensive online listing was *The Blogging Libraries Wiki*, a publicly accessible and editable communal online resource launched in April 2006 by Canadian librarian Amanda Etches-Johnson.

Although some libraries listed on this wiki were also listed elsewhere and/or returned in the results of several online searches, the researcher believes that significantly fewer library blogs would have been located without access to this resource, given the low number of valid overall results returned through other online search techniques, indicating low visibility and/or online presence of library blogs on the World Wide Web.

7.1.3 Library blogs by library type

Table 3. Types of library using blogs

Library Type	Total	%
Academic	218	47.70
Public	188	41.14
Special	29	6.35
School	22	4.81
Total	457	

The located sample population for both special and school libraries was lower than anticipated, especially given that blogging in an educational setting is regularly discussed and advocated in educational literature (see Embrey, 2002; Huffaker, 2004; Clyde, 2005).

However, it may be that a library blog for specialised intended audiences such as primary and/or secondary school staff and students, research staff, or corporate workers is confined behind a corporate firewall, and therefore inaccessible to the researcher. These types of library blogs may have also been categorised as an internal library blogs on online indexes and listings. It is also possible that a number of libraries may have a publicly accessible web page, which provides a link to a library blog, but the blog content is restricted to registered customers.

7.1.4 Identification of geographical information

Table 4. Library location details

	Total	%	Academic	Public	School	Special
Institution identified	317	69.37	165	112	16	24
City/Town identified	155	33.92	57	88	7	3
State/Region identified	166	35.01	75	66	8	11
Country identified	55	12.04	24	22	3	6
Total						

At least 30% of all library blogs did not indicate which library they were associated with. Given that these library blogs are publicly accessible through the World Wide Web and therefore represent an online presence for the library, it is unusual that for 140 library blogs, it was not deemed to be important to provide blog readers with an indication as to which library the blog that they are accessing is associated with.

While some library blogs were located in countries where information about regions and states were not applicable, it is still surprising that so few library blogs provided details about their physical location. Although some libraries did not identify the actual library with which they were associated, they did provide details about the larger institution to which the library belonged.

7.1.5 Global diversity of library blog creation

Table 5. Country of origin

	Total	%	Academic	Public	School	Special
USA	395	86.43	180	176	18	21
Canada	28	6.13	23	5		
Australia	10	2.19	3	4	3	
New Zealand	8	1.75	6	1	1	
England	4	0.88	1	1		2
Scotland	3	0.66	2			1
Singapore	3	0.66				3
International	2	0.44				2
Ireland	2	0.44	1	1		
Botswana	1	0.22	1			
Netherlands	1	0.22	1			
Total	457	100	218	188	22	29

As indicated in Table 5, only 12.04% of active library blogs indicated which country they were located in. While other information, such as the region or state and/or town or city, was often useful in determining the country of origin, further investigation was sometimes required to correctly identify the country of origin. In many instances, investigation of links on the library blog, for example, to the main library website, provided sufficient information, whereas in other cases, more thorough online searches were required.

Two library blogs were determined to be international in origin. These library blogs were associated with organisations which had offices in a variety of countries, and

any library and/or information resource staff member from any office in any country could contribute information to the organisation's library blog. Hence, it was decided to label these as international blogs rather than allocate them a particular country.

7.1.6 Creation and maintenance of library blogs

Table 6. Blogging software³⁹

Software	Total	%	Academic	Public	School	Special
<i>Blogger</i>	173	37.86%	65	87	13	8
<i>Information not available</i>	164	35.89%	80	69	2	13
<i>Movable Type</i>	47	10.28%	31	13		3
<i>WordPress</i>	45	9.85%	26	12	3	4
<i>TypePad</i>	10	2.19%	7	2	1	
<i>Manila</i>	3	0.66%	2		1	
<i>Blog-City</i>	3	0.66%		2	1	
<i>Expression Engine</i>	2	0.44%	1			1
<i>LiveJournal</i>	2	0.44%	2			
<i>Blogsome</i>	1	0.22%	1			
<i>Blosxom</i>	1	0.22%	1			
<i>Drupal</i>	1	0.22%	1			
<i>ePress</i>	1	0.22%	1			
<i>mo'time</i>	1	0.22%		1		
<i>RadioUserland</i>	1	0.22%		1		
<i>Trumba</i>	1	0.22%			1	
<i>Weblogs.us⁴⁰</i>	1	0.22%		1		
Total	457		218	188	22	29

This information represents the type of software used at the time of the research; however, it is important to acknowledge that the researcher did not distinguish between different versions of blogging software, for example, Movable Type (version 2.661) was recorded simply as Movable Type software. It is also important to acknowledge that some long-established library blogs may have started off using one type of blogging software and have subsequently migrated to another type of software which better suits the needs of the library, the blogger(s) and/or blog readers. This type of

³⁹ See Appendix III for full list of individual URLs relating to each type of blogging software.

⁴⁰ Weblogs.us is actually web hosting service for blogs created using WordPress software. It was incorrectly credited on the front page of the library blog as the type of software used to create the blog.

information is typically difficult to determine without a thorough online investigation of previous blog content and therefore was not included in this research study.

In the majority of cases, the blogging software was openly identified on the front page, by way of a software logo and/or textual identification of the blogging software (61.49%). In other instances, the blogging software was indicated in the URL (39.61%) or by the logo which precedes the URL (33.48%). The use of a logo preceding the URL appears to be most prevalent with Blogger software. In some instances, the type of blogging software may have been identified by more than one method. However, few library blogs credited either the design (2.19%) or template (2.63%) used.

While freely-available Blogger dominated the type of software package used in library blogs (37.86%), the use of this software package varies greatly between different types of libraries. Blogger accounts for close to half of all public library blogs (46.28%), and is also popular with school libraries (59.09%), whereas it is used by less than a third of both special libraries (27.59%) and academic libraries (29.82%). The no-cost factor of this particular blogging software may be an important consideration for certain types of libraries with limited budgets who wish to engage with their customers via blogs. Another reason for the high use of free blogging software such as Blogger is that blogging may be relatively new to many libraries and therefore, while they are trialling the use of blogs as an external communication tool, they may choose not to invest money into a self-hosted and/or self-managed blogging software package while they experiment. Blogger was among the first blogging software packages to be released in mid-1999 and continues to receive significant media exposure. Blogger also continues to appear in the library literature as an example of how quick and easy it is to set up a library blog (see Fitcher and Cervone, 2005).

A significant number of all library blogs (35.89%) did not provide any information on the front page about the type of blogging software used to maintain the blog. There may be a number of possible reasons for this lack of information. Some libraries may elect not to identify their choice of blogging software for reasons of privacy or lack of aesthetic cohesion with the overall blog design; however, they may willingly identify it when specifically approached. For example, while Ann Arbor District Library (AADL) did not openly identify which type of blogging software it uses for its library blogs, Kenney (2005:27) reports that “Drupal [...], an open source content management system,” is the architecture behind the library’s many blogs. The disclosure of Drupal as AADL’s choice of blogging software would have significantly raised Drupal’s presence in the software statistics.

Another reason for non-identification of blogging software may be that library blogs are maintained within a particular institutional domain, that is, they are integrated into a larger institutional online environment which contains more than the library blog and may be part of a larger content management system and/or institution-wide software package. Some libraries may opt to create their own in-house blogging software, which Goans and Vogel (2005) report was the decision made by Georgia State University, however, as no information was provided on the front page of the blog, the multiple blogs from this institution were recorded as “information not available”. Open source blog software, such as Drupal or Greymatter, is also often part of a larger content management system and therefore may not be readily identified on a library blog.

Table 7. Type of blogging software used

	Total	%
Fully hosted blogging service	180	39.39
Blogging software not indicated	164	35.89
Self-managed blogging software package	100	21.88
Can be either fully hosted or self-managed	13	2.84

Given the large number of library blogs which did not indicate what type of blogging software they were using (35.89%), discussion about any trends with the different options is limited, however there is an obvious increase in the number of self-managed blogging options.

As it can be difficult to definitively determine which library blogs are using hybrid publishing options, it was decided that any blogging software packages which could potentially be installed and/or hosted locally would be included in the self-managed figures. These types of blogging packages require more technical know-how than working with a fully-hosted blogging package, and therefore there is an element of self-management to them.

While local hosting is available as an advanced feature with Blogger software, without further in-depth online investigation of library blogs specifically using Blogger, it is impossible to determine whether any of the library blogs utilised this option. As Blogger is typically suggested in the literature as an example of fully-hosted, free blogging software (see Fitcher and Cervone, 2005), the researcher chose to view Blogger as a fully hosted software package.

Fully hosted software services included Blogger, Blog-City, LiveJournal, Blogsome and mo'time. Self-managed software included Movable Type, Trumba, Drupal,

WordPress⁴¹, Bloxom, Expression Engine, epress, RadioUserland. Two types of blogging software, Manila and TypePad, can be either fully hosted or entirely self-managed.

7.1.7 Currency of content

Table 8. Blog update timeframe

Timeframe of most recent update	Total	%
Same day	7	1.53
1 day	73	15.97
2 days	51	11.16
3 days	37	8.10
1 week	76	16.63
2 weeks	68	14.88
1 month	79	17.29
2 months	42	9.19
3 months	18	3.94
unknown	6	1.31

Table 9. Cumulative blog update timeframe

	Total	%
Within 3 days	168	36.76
Within 1 week	244	53.39
Within 2 weeks	312	68.27
Within 1 month	391	85.56
Within 2 months	433	94.75
Within 3 months	457	100.00

Slightly more than a third of all library blogs (36.76%) had created a blog post within the previous three days, and just over half of the library blogs (53.39%) had posted content to the blog within the previous week. A large majority (85.56%) had at least one blog post within the previous month. The particular time of year when this research was conducted may also have an influence as to the recent, or not-so-recent, nature of posting on many library blogs.

⁴¹ Since this research was completed, the creators of the WordPress blogging software have launched a free web hosting service, which is available at <http://www.wordpress.com>

However, as the frequency of posting, that is, the total number of blogs posts during a specific timeframe, was not included in this research project, it is impossible to determine whether recording the timeframe of the most recent blog post is an accurate indicator of regular blog posting over the previous three months.

7.2 Features

Although there is no definitive list of compulsory blog features and “everything about a blog post is essentially optional” (Doctorow *et al.*, 2002:10), there are certain features which many commentators agree are typically present on most blogs. These include⁴²:

- blog name;
- date, time and author of post;
- headline (title) of the post;
- archives, which may be organised by day/week/month/year or by topic;
- permanent link (URL) to the post, which continues to work when the post has moved from the front page to the archives.

There are also a number of other features which may potentially appear on a blog, and are often referred to in discussions of ‘advanced’ blogging strategies (see Bhatt, 2005; Fitcher and Cervone, 2005). Some of these features are⁴³:

- audio/image/video posting;
- blogroll;
- RSS feed (automatic production of news feed detailing blog headlines);

⁴² This list is based on lists compiled by Clyde (2004a), Fitcher and Cervone (2005) and Laning *et al.* (2005).

⁴³ These features are taken from lists compiled by Clyde (2004a), Fitcher and Cervone (2005) and Laning *et al.* (2005).

- search facilities;
- comments facility (allows readers to respond to a specific post);
- links;
- list of post categories/tags/topics;
- email and/or physical contact details of blogger(s);
- list of titles of recent posts;
- opinion polls;
- trackback (method of referencing particular blog posts on other blogs, sometimes referred to as a remote commenting facility).

Using content analysis, the researcher compiled a list of features present on 457 active library blogs. A full list of these features can be found in the Appendix V. While many of the identified features fall into the broad categories outlined above, a number of other features were also identified. This section will identify and discuss selected features of the active blogs located for this research project.

7.2.1 Contextualisation of library blog

Table 10. Blog and library identification

	Total	%
Blog – name listed	443	96.94
Library/institution – full name listed	283	61.93
Library/institution – acronym listed	101	22.10

Although almost all library blogs were clearly identified through the use of a blog name, typically at the top of the front page, a few (3.06%) chose not to provide a name for the blog, which could have potentially indicated to blog readers where this blog originated from and/or its potential purpose.

While 61.93% provided the full name of the institution with which they were associated, others chose to use the acronym of the institution, for example, the Berkeley campus of the University of California is identified as UC Berkeley. Some library blogs used both the full name of the institution as well as an acronym. This explains the disparity between the above results and those listed in Table 4 which reports that 69.37% library blogs clearly identified the institution with which they were associated.

The lack of clear identification of the institutional creator of a library blog obviously restricts the online profile of that particular library to those who are familiar with the particular institution that created the library blog. It does not provide the uninitiated blog reader with any ready information about the library. The identification of legitimate and reputable information sources is a common goal for many libraries, yet it appears that many have failed to apply this to their own online publishing endeavours.

Table 11. Information about blog and/or library

	Total	%
About blog – sub-heading of blog name ⁴⁴	173	37.86
About blog – link	61	13.35
About library – link	59	12.91
About library – statement on front page	41	8.97
About blog – statement on front page	22	4.81

Few libraries openly stated the purpose of the blog in a specific section, or provided detailed information about the library, on the front page of the blog. While some library blogs did supply this type of information, either through a link and/or as a sub-heading to the library blog name, it appears to be of low importance to many

⁴⁴ An example of a blog sub-heading is: *Gargoyles loose in the library: news and views from the Uni High Library* Available at <http://www.uni.uiuc.edu/library/blog/>

libraries. This type of information could be used as a method of determining the legitimacy and reliability of the author(s) of the online content.

Perhaps there is an assumption that information contained in the blog content and/or blog title sufficiently communicates this type of information, or that the customer base which may use the blog is already aware of the blog's purpose and the link with the library. Unfortunately, this perspective may potentially disadvantage a wide variety of library blog users, including those new to blogs and blogging, people from non-English speaking backgrounds and people who are unfamiliar and/or uncomfortable with new technology.

Table 12. Association with a parent institution

	Total	%
Library webpage – link	276	60.39
Library catalogue – link	170	37.20
Institutional webpage – link	126	27.57

Only 60.39% of library blogs contained a link to the library with which they were associated. Hence, almost 2 in 5 libraries didn't feel the need to provide a clear link between the library and the blog. This may be indicative of the lack of integration of blogs with library branding, or that some library blogs have been established as a trial project and are not yet an 'official' part of the library's online communication strategy.

While some library blogs (27.57%) indicated that they were part of a larger institution, typically a tertiary educational facility, the low level of identification potentially indicates that this information is typically found on the library website, and as such, it was not worth repeating on the library blog.

7.2.2 Identification of geographical location of the library

Table 13. Identification of physical library location

	Total	%
Phone number – listed on front page	69	15.10
Street address – listed on front page	60	13.13
Street address – link	9	1.97
Local schools information – link	8	1.75
Town website – link	6	1.31
Information about town and/or area – link	4	0.88
Local government website – link	4	0.88
Map and/or directions – link	3	0.66
Campus map – link	2	0.44
Local weather information – link	2	0.44
Drop-box locations map – link	1	0.22

Few libraries provided explicit information about how to make physical contact the library. No library provided fax contact details, potentially indicating that this method of communication is no longer viewed as appropriate for library customers. Curiously, the library phone number is listed slightly more often (15.10%) than the library's street address (13.13%). It appears that the library blog is not commonly used to promote customer interaction with the library in a physical manner.

While it is possible that this type of information is available through another webpage linked to the library blog, such the library's website, it also potentially indicates that library blogs are intended to be used as an online mechanism for sharing information and engaging with the library user in a virtual sense, rather than promoting the physicality of the library.

7.2.3 Content creator(s)

Table 14. Information about blog authors and/or library staff

	Total	%
“Contact us” – link	104	22.76
Email address – listed on front page	37	8.10
Name(s) of blog contributors – listed on front page	63	13.79
Name of library staff – listed on front page	39	8.53
Name(s) of blog contributors – link	7	1.53
About me – link to “view my complete profile”	65	14.22
About me – statement on front page	4	0.88

There appears little desire by most libraries to provide explicit contact details for their library staff and/or blog contributors. The most common method of contact is a generic “contact us” link listed on the front page. It is not clear whether this “contact us” link connects to a separate webpage with a full listing of staff contact details, an online form to be completed so that staff can then respond to incoming queries or automatically launches a web-based email platform.

Again, providing information about the creator(s) of blog content provides blog readers with the confidence that the blog content is legitimate, accurate and reliable, and has actually been provided by an institution’s library and information staff. It also raises the profile of library and information staff and demonstrates the valuable service that they provide in filtering and organising useful and credible information.

In many instances, library blogs contained more than one of these features; hence the actual number of library blogs which provided details about the blog author(s) and/or library staff is in reality lower than these results indicate.

7.2.4 Blog posts

Table 15. Information about blog posts and archives

	Total	%
Date of posting	436	95.40
Year of posting	431	94.31
Posts titled	429	93.87
Time of posting	367	80.31
Name of poster	310	67.83
Archives – listed on front page	367	80.31
Archives – link	42	9.19
Archives – searchable by date and/or category	27	5.91
Archived by month/year	334	73.09
Archived by date	45	9.85
Archived by category	7	1.53
Archived by week	2	0.44
Archived by year	2	0.44
Archived by author of blog post	1	0.22
Archived by day	1	0.22
Number of blog posts in each archive period – listed	20	4.38
Recent/previous posts – listed in side bar	231	50.55
Permalink – enabled	84	18.38
Link to show entire post	54	11.82
Trackback – enabled	48	10.50
Recent/previous posts – link	10	2.19
Link to most popular posts	5	1.09
Number of times post read – listed with blog post	5	1.09
Comments – enabled	277	60.61
Comments – link	276	60.39
Number of comments – listed with blog post	265	57.99
Comments – listed with blog post ⁴⁵	2	0.44
Recent comments – listed with timeframe since posting	2	0.44
Categories associated with post – listed in side bar	148	32.39
Categories associated with post – listed with blog post	124	27.13
Number of blog posts associated with category – listed in side bar	41	8.97
Categories associated with post – link	20	4.38
Tags associated with post – listed with blog post	4	0.88
Categories associated with post – listed in side bar with timeframe since posting	3	0.66

⁴⁵ Although one library blog listed the comments on the front page, it also provided the blog reader with a link to open a new window to view the comments associated with a particular blog post.

Information such as the date, year and title of the blog post was consistently provided by over 93% of library blogs, while details about the time of posting (80.31%) and the name of the poster (67.83%) were slightly less common.

The majority of library blogs enable easy access to the archives of blog posts, by listing the archives on the front page, typically in month/year order. Although few provided tools specifically for searching blog post archives, others provided general blog search facilities⁴⁶ (35.67%) which would also allow access to the blog post archives.

The low level of permalink provision (18.38%) is somewhat surprising, given that this feature is listed as a relatively common feature by many commentators (see Clyde, 2004a; Fitcher and Cervone, 2005; Lansing *et al.*, 2005).

Although it appears that recent posts were listed in a side bar by only half of the library blogs (50.55%), in many cases, access to these previous posts was also available through archive listings and/or archive search options. However, if a library user does not regularly visit the library blog, listing the recent posts in a side bar would provide easier access to previous content than having to search through archival material, especially if this archival content is only accessible by date, rather than keyword or category search options.

While 60.61% of all library blogs allowed comments, this does not accurately reflect the actual usage of the commenting facility by library blog readers. In most instances, the number of comments associated with a post was zero. The enabling of the

⁴⁶ See Table 23.

comments facility on 3 in 5 blogs may be interpreted as an indication that many libraries want to engage in dialogue with library blog readers.

The researcher elected not to include information about the number of comments per blog posts for analysis. This was excluded for a number of reasons, one of which is that the presence/absence of comments appears to be heavily reliant on blog post content, for example, a blog post indicating downtime for a particular database is unlikely to result in a comment from blog readers, whereas another post on the same blog asking for feedback about a new e-journal may generate a significant amount of interaction from blog readers.

In some instances, the absence of particular features may reflect a lack of functionality with some blogging software. For example, prior to the release of Blogger Beta in August 2006, bloggers using Blogger software were unable to add labels, also known as categories, to their posts⁴⁷.

There was substantial crossover between library blogs which listed categories in a side bar (32.39%) and also included them at the end of the blog post (27.13%), so the actual level of blog content categorisation is still relatively low. Allocation of blog post content to particular categories or tags could potentially greatly benefit blog readers who could then follow topic (category) threads and would also be offered more variety in search and archival options.

Providing information to the blog reader about key blog content, by highlighting the most popular posts (1.09%), indicating how often a blog post was read

⁴⁷ "Blogger in beta", August 14, 2006, *Buzz: the official Buzz from Blogger*. Available at http://buzz.blogger.com/2006_08_01_archive.html [accessed 5 September, 2006]

(1.09%) or providing details about the number of posts associated with a particular category (8.97%), alerts the blog reader to potentially useful and relevant information. However, these are relatively uncommon features for most library blogs.

7.2.5 Credit for information sources

Table 16. Acknowledgement of information sources

	Total	%
Links in blog post to sources of information	343	75.05
Credit for photographs/images	2	0.44

Not all library blogs linked to external sources of information, as the primary focus of some library blogs was simply to communicate basic information about the library, such as technological information (for example, unavailability of certain library e-resources such as databases), library staff and/or changes in hours. Hence, these library blogs have no reason to link to other sources of information.

For those who do provide information from other sources, linking to the source of the information creates transparency for the blog reader. While images and photographs may not have been explicitly credited on the library blog, it is possible that this type of information is contained within the metadata associated with the digital image.

7.2.6 Links to other library services and products

Table 17. Connections with other library services and products

	Total	%
Other library services – link	116	25.38
“Ask-a-librarian” – link	101	22.10
Internet resources – link	95	20.79
Library user account information – link	69	15.10
Databases – link	68	14.88
Generic online resources – link	57	12.47
Research guides – link	40	8.75
Generic online reference resources – link	37	8.10
Library publications – link	33	7.22
New library resources – link	32	7.00
Library instruction on “how to use the library” – link	23	5.03
Library news – link	23	5.03
Inter-library loan – link	18	3.94
e-journals – link	17	3.72
“Homework Help” – link	12	2.63
Encyclopedias – link	11	2.41
Generic online research resources – link	11	2.41
Web searching help – link	10	2.19
Dictionaries – link	8	1.75
Citation help – link	6	1.31
Press releases – link	3	0.66
WorldCat – link	3	0.66
Library of Congress – link	2	0.44
Dissertations – link	1	0.22
Faculty publications – link	1	0.22

A distinction was made when coding the data related to connections with online resources. If a library blog indicated a specific link to online reference resources only, then it was recorded separately from a generic link to internet resources, which may or may not have included reference resources. The researcher felt that a link to online reference resources could refer to both internally and externally produced reference resources, whereas internet resources indicated a link with externally produced resources.

Customer groups for different library types may have an impact on the number and type of features used when creating and maintaining the library blog for that

particular consumer group. For instance, a blog aimed at younger library customers may include fewer individual links as opposed to a generic link such as “Homework Help” which then links to another webpage where all relevant online resources are listed.

There is a certain level of assumption that library customers will understand what the links are about, for example, if a customer is unsure what a link to WorldCat or the Library of Congress offers, they may not explore that link without sufficient reason(s) and/or encouragement. Again, in providing a generic link to “other library services”, there is also some level of expectation that blog readers are able to confidently identify what types of other library services are associated with this link. This is again dependant on both the library type and the customer group.

The “Ask-a-librarian” link was rarely clearly demarcated as a place to undertake an online reference enquiry, and did not usually indicate whether it provided a link through to an online form to make an enquiry, launch an automatic email programme or engage a virtual reference service. The “Ask-a-librarian” link may therefore also be used by customers to make any type of enquiry. The researcher was unable to further explore this feature without access to the online version of the library blog.

7.2.7 Blog links

Table 18. Links with other blogs

	Total	%
Blogroll – internal blogs listed	75	16.41
Blogroll – external blogs listed	38	8.32
Blogs that list here – link	10	2.19
Blogroll – blogs of unknown origin listed	3	0.66

The majority of external blogs were easily identifiable as well-known librarian blogs, for example Librarian.net⁴⁸ and The Shifted Librarian⁴⁹, and the internal blogs were clearly listed as such, with unambiguous references to the library and/or larger institution.

The ability to provide links to other sources of information is often discussed as an advantage to blogs, however, the linking to other blogs is relatively low within this population sample. It may be that library blogs provide sufficient links to other online sources of information within the actual blog post.

The lack of links with other blogs may be an as yet unexplored reason for low visibility of library blogs in the online environment. Organisations such as Technorati, which monitor the global blogosphere, track the number of links between blogs to determine the perceived relevance of blogs based on who is linking to whom. In the sample population identified for this research study, the majority of library blogs are operating in a relatively closed environment, with few links to the outside blogging community, which will not raise their online profile with blog search engines and indexing services.

⁴⁸ Available at <http://www.librarian.net/>

⁴⁹ Available at <http://www.theshiftedlibrarian.com/>

7.2.8 Keeping blog readers in touch and up-to-date

Table 19. Methods of ongoing contact with blog content

	Total	%
RSS subscription button	309	67.61
RSS explanation – link	87	19.04
RSS – subscribe via other aggregator services ⁵⁰	64	14.00
Subscription to e-newsletter/e-alert/e-notification	44	9.63
RSS – subscribe via Bloglines	36	7.88
RSS – link to other available RSS feeds	18	3.94
Instant messenger (IM) status – listed on front page	12	2.63
RSS explanation – listed on front page	12	2.65
Instant messenger (IM) contact(s) – listed on front page	7	1.53

In promoting a library blog as a key online contact point for customers, libraries could use this format to educate library users about other technologies, such as RSS, instant messaging (IM) and podcasts, which may be potentially useful for them.

However, although a substantial number of libraries (67.61%) provided an opportunity to subscribe to an RSS newsfeed with the click of a button, few provided any explanation of what RSS actually involves, with just under 1 in 5 (19.04%) providing a link to an explanation of RSS and only 2.65% providing any explanation on the front page of the blog. Until RSS and news aggregator services are widely accepted and understood by library customers, RSS is likely to be under-utilised. Nonetheless it is encouraging to see that many libraries offered customers a choice of RSS newsfeeds subscription options.

Slightly less than 1 in 10 (9.63%) offered the blog reader a subscription to an e-newsletter, e-alert or e-notification, rather than taking the opportunity to use the blog as a way to enhance the library community's knowledge of new and emerging technologies such as RSS. It may be that these libraries are responding to their community's desire to

⁵⁰ See Appendix IV for list of other aggregator services.

access blog content in a more readily understood way, having a newsletter emailed to them rather than learning about new technologies such as news aggregators.

7.2.9 Intellectual property, policies and procedures

Table 20. Library blog policies and procedures

	Total	%
Copyright statement – listed on front page	48	10.50
Disclaimer – link	24	5.25
Copyright statement – link	18	3.94
Blog and/or website policies – link	14	3.06
Library policies and procedures – link	8	1.75
Privacy statement – link	7	1.53
Disclaimer – listed on front page	6	1.31
Comment guidelines – link	5	1.09
Comment guidelines – listed on front page	2	0.44
Statement of library values – listed on front page	2	0.44
Statement of institutional values – listed on front page	2	0.44

Given that library blogs available via the World Wide Web are in the public arena and are the intellectual property of the library, few libraries chose to make their claim to the blog content explicit. It is possible that some libraries view the blog as a portal or filter site of online information and as such, by crediting and/or linking to the original information source, they do not then need to further copyright the information. Other libraries may not have seen any relevance to copyright information which was provided to the blog reader about technical outages and changes to library hours.

There is a high level of freedom in terms of how library customers can engage with and use content from the library blog, as few libraries provide explicit guidelines about content ownership and acceptable procedures when interacting with the library via the library blog.

7.2.10 Measurement of blog usage

Table 21. Statistical information about library blog

	Total	%
Site meter	74	16.19
Number of users online indicated	4	0.88
Blog statistics – listed on front page	2	0.44
Website statistics – link	1	0.22

In this instance, a lack of front page documentation about the blog's online traffic may reflect the fact that this type of information is gathered behind the scenes by staff maintaining the library blog. This type of information may be collected in such a way that, if shared in a public domain, it would inadvertently reveal confidential information and compromise the online safety of library blog staff. For example, when measuring the usage statistics of its multiple library blogs, Georgia State University (GSU) readily acknowledged that it filtered its reporting systems to exclude IP addresses of specific computers and unique cookies associated with staff responsible for maintaining the library blogs (see Goans and Vogel, 2005). GSU retained the right of non-disclosure of these exact IP addresses to maintain library staff safety.

While this type of information may be of interest for some library blog users, it is ultimately of more use for library staff who use it to determine whether library blog traffic is increasing, decreasing or remaining static, and whether blog traffic is influenced by certain events at the library, by particular media exposure or through targeted promotional activities.

7.2.11 Site navigation

Table 22. Navigation aids

	Total	%
Site map – link	42	9.19
Site index – link	25	5.47
Total (combined)	67	14.66

These two terms are often used interchangeably, to indicate a web page which lists all pages associated with a particular website, such as a blog, in a hierarchical manner. Slightly less than 15% of all library blogs felt it important to include a navigation aid for library blog users. With the increasing reliance on search tools, rather than navigational aids, some libraries may have elected to rely solely on a range of search options to allow library blog users access to other pages associated with the library blog. Some library blogs may not require a navigation tool such as a site map, due to the simple nature of their library blog which does not support a substantial array of links or associated pages.

7.2.12 Finding information

Table 23. Search options

	Total	%
Blog search – search box on front page	163	35.67
Library website search – search box on front page	42	9.19
Blog search – link	20	4.38
World Wide Web search – search box on front page	16	3.50
Library catalogue search – search box on front page	13	2.84
Search tips – link	2	0.44

Given that blogs are a supposed to be a way to both share and manage information resources, it is surprising that only just over a third (35.67%) of library blogs provide easy access for blog readers to access past information through a direct search box on the front page of the blog.

There are alternative ways to access blog content, including searching the blog archives and examining blog posts associated with different categories. However, while the majority of library blogs provide ready access to their archives on the front page of the blog⁵¹, the blog reader would need to be aware of where, for example, in which month/year listing, to search for the information, rather than being able to search by keywords, phrases and/or topics.

Without further investigation of the habits and self-identified search needs of blog readers in relation to blog content, it is difficult to determine whether the provision of search tools such as front page search boxes is a critical feature for library blogs.

7.2.13 Enabling access for all blog readers

Table 24. Accessibility options

	Total	%
Change text size – link	9	1.97
W3C compliance – listed on front page	4	0.88
“Bobby” approval – listed on front page	2	0.44
Change screen colours – link	1	0.22
Low band-width display – link	1	0.22

Although text size and screen colours can be altered on an individual’s computer, identifying the fact that the library blog meets the World Wide Web Consortium’s (W3C) requirements or has been checked through a web accessibility assessment tool such as Bobby, illustrates that a library has taken potential users into account when designing the library blog⁵². While these results potentially indicate that providing a library blog which meets the accessibility needs all library blog readers is a

⁵¹ See Table 15.

⁵² See Appendix IV for URLs for W3C and Bobby software.

low priority for the majority of libraries, it may also be an indicator of low functionality associated with some blogging software.

7.2.14 Social software

Social software is “software that supports group interaction” (see Allen, 2004), and which enables people to “connect or collaborate through computer-mediated communication and to form online communities”⁵³. Social software is a modern form of earlier collaborative computer-mediated interactions, for example groupware. Blogs are often described as early developments in the modern social software revolution.

Table 25. Inclusion of social software in library blogs

	Total	%
Flickr.com – link to or use of	20	4.38
Delicio.us – link to or use of	15	3.28
Technorati – link	13	2.84
MySpace.com – link	7	1.53
Institutional wiki – link	4	0.88
Library Thing – link	4	0.88
Podcast – link	4	0.44
Furl – link	3	0.66
Listen to podcast of blog post – link	3	0.66
LiveJournal – link	3	0.66
Podcast archive – link	3	0.66
Random books from my library – listed on front page	3	0.66
Explanation of podcasting – link	2	0.44
Facebook – link	2	0.44
Allconsuming.net – link	1	0.22
Explanation of social bookmarking and tagging – link	1	0.22
Explanation of wiki- link	1	0.22
Listservs – link	1	0.22
Newsgroups – link	1	0.22
Spurl – link	1	0.22
YouTube – link	1	0.22
What I am watching – link	1	0.22
What I am reading – link	1	0.22
What I am listening to – link	1	0.22

⁵³ Available at http://en.wikipedia.org/wiki/Social_software

The majority of libraries have not yet explored the inclusion of social software applications as part of their blogs, however much of this primarily web-based technology is still relatively new and is in a continuous phase of development, growth and change.

Length of time which a blog has been established can reflect commitment to ensuring that a blog is used as a key communication tool as well as reflecting the maturity of the library blogosphere. The longer a blog has been established, the more opportunity that the blogger maintaining the library blog has to explore, utilise and integrate additional social software technological tools, such as social bookmarking, wikis and podcasts.

Some social software applications, such as wikis and podcasts, may be restricted to registered library community users, especially in an academic environment, and therefore may not have been readily accessible to the researcher. This may reflect issues of intellectual property relating to content prepared for specific library user groups.

7.2.15 Multimedia experimentation

Table 26. Non-textual information used in library blogs

	Total	%
Photographs and/or images ⁵⁴ posted	118	25.82
Images of dvds/cds/book covers	90	19.69
Video material posted	6	1.31
Podcast – link	4	0.44
Listen to podcast of blog post – link	3	0.66
Podcast archive – link	3	0.66

The lack of inclusion of non-textual information may reflect differing levels of functionality of blogging software or a lack of confidence and/or knowledge in the

⁵⁴ Excluding images of dvds/cds/book covers.

technological abilities of library staff maintaining the blog. The low level of multi-media usage may also be a conscious decision to make the library blog more accessible for people with less sophisticated computer access, such as dial-up internet connections and older computers.

7.3 Blog Purpose(s) and Use(s)

The following table provides a selective list of library blog purposes and uses. A full list of identified blog purpose(s) and use(s) can be found in Appendix V. The information contained in Table 27 does not constitute a list of recommended or required blog purposes and uses; instead it demonstrates some of the diverse reasons why libraries use blogs to communicate with their library users.

In many instances, library blogs had multiple purposes and uses; hence the results do not total 100%. For example, a library blog may be used for a combination of purposes, such as providing news about the library as well as promoting upcoming events, or a library blog may instead be used for a single focus, such as providing an online discussion space for a library-organised book group. Again, the type of library had some influence on the different purposes and uses of the library blog, however comparisons between libraries is limited due to the small population sample of specific library types.

Table 27. Blog purposes and uses

	Total	%
News about library ⁵⁵	266	58.21
Identification of external online resources relevant to user group	239	52.30
Identification of external online news relevant to user group	200	43.79
Promote digital library materials – in blog post	180	39.38
Promote upcoming library events – in blog post	175	38.29
Promote physical library materials – in blog post	128	28.01
News about library staff	115	25.16
Review new library collection material(s) – in blog post	100	21.88
Promote new library collection material(s) – in blog post	95	20.79
Technical information ⁵⁶	63	13.79
Book reviews – in blog post	57	12.47
Promote summer reading programme	47	10.28
Discuss books for children	16	3.50
Book group discussion space	13	2.84
Conduct surveys and/or polls	9	1.97
Summer reading programme discussion space	5	1.09
Genealogy Services discussion space	3	1.60

Etches-Johnson (2005:35) believes that ‘what’s new pages’ are “perhaps the single largest use of the weblog format by libraries”, and this view is supported by the results. Almost 3 out of every 5 library blogs (58.21%) were used to communicate “news about [the] library”. This overarching statement of purpose was often identified through the sub-heading of blog names and encompassed all manner of general information about happenings at the library, including changes to the physical appearance of the library, changes in library hours, and information about what was currently occurring at the library, including events and exhibitions.

The identification of online resources (52.30%) and online news sources (43.79%) external to the library’s own e-resources are the next most common uses of library blogs. The specific content was often directly related to the blog reader

⁵⁵ This included information about changes to library hours and construction updates.

⁵⁶ This included information about passwords and ‘down-time’ for electronic resources.

community, for example, the identification of relevant online legal news for a library blog provided for law students.

Library blogs are also used to promote and review both new and existing digital and physical library materials. Just over one in five (21.88%) used the library blog to review all types of new library materials, including books, electronic resources and audio-visual materials. Some type of book review, that is, not just reviews of recently added material, was included in a blog post of 12.47% of library blogs, while another 6.35% provided a link to book reviews somewhere on the library blog's front page⁵⁷.

The promotion of library material(s) was an important aspect to many library blogs. This included information about how library users could up-skill themselves in using particular electronic resources as well as providing instructional information about how to make best use of library materials. Digital library materials were promoted 39.38% of the time, whereas physical library materials were promoted 28.01%. Given that a library blog exists in a digital environment, it makes sense that digital materials are highlighted more often.

Although some library blogs did not review new library materials, 20.79% did provide information to indicate that new material(s) had been added to the library collection, often in the form of a blog post containing a lengthy list of new titles, or alternatively, providing a link to a subject-specific library blog or webpage. In some instances, a hyperlink of the title of the new material(s) was provided within the blog post, however, due to the printed nature of the material being analysed, the researcher was unable to ascertain whether this was a direct link to the item in the library catalogue

⁵⁷ See Appendix V.

or to a subject-specific library webpage. In some instances, there was no link at all, meaning that the blog post consisted of a lengthy text-only list of new materials added to the library collection, leaving the blog reader to determine the best way for them to locate the materials.

Due to the time of year that the research was conducted, that is, during the early stages of the northern hemisphere summer, results related to promotion of summer reading programmes (10.28%) may be higher than if the research was conducted at other times of the year.

8.0 Conclusion

8.1 Changes in the library blogosphere from 2003 to 2006

The results of this research project confirm a substantial increase in the number of library blogs used as external communication tools, up from 57 in 2003 to 457 in 2006, representing an increase of 802%. Subsequently, there has also been an increase in the number of institutions creating library blogs, up from 51 in 2003 to 293 in 2006, representing an increase of 575%. There has been growth across all types of libraries creating library blogs, as reflected in the following increases, academic libraries (948%), public libraries (752%), school libraries⁵⁸ (100%) and special libraries (580%).

Clyde (2004a:92) located library blogs from only three countries, the United States of America, Canada and the United Kingdom, in 2003. Three years later, library blogs published in English are emerging from a greater diversity of countries, including New Zealand, Scotland, Singapore and Botswana, however the United States of America and Canada still represent the largest number of library blogs, with a combined total of 423 library blogs (92.56%).

Blogging software usage has also changed since Clyde's 2003 study. Although Blogger continues to be the most widely used blogging software, its dominance has dropped from 43.90% in 2003 to 37.86% in 2006. There is now a much greater choice of blogging software packages and hosting options, including open source software and commercial (paid) software and services. Clyde (2004a) identified seven different types of blogging software, whereas fifteen blogging software packages were identified in the 2006

⁵⁸ There were no school libraries in Clyde's original study.

library blog population sample. Five of the software packages identified in 2003 were still in use by library blogs in 2006.

Slightly over 1 in 3 library blogs (35.89%) of the 2006 sample population provided no information about the type of blogging software used to create and maintain the blog, which is up from Clyde's 2003 finding of 22.80%. It may be that many of libraries have opted for self-managed blogging software, or selected a hybrid blogging option, such as local hosting of a commercial blogging software package, which is then incorporated into an institution's larger information technology (IT) infrastructure.

Although it is difficult to accurately determine how many libraries are paying for blogging software packages and/or hosting, rather than relying on free software and hosting options, there is some indication that more libraries are opting for the increased functionality and reliability of self-managed blogging packages, such as Movable Type and WordPress, with at least 1 in 5 library blogs (21.88%) choosing self-managed software packages in 2006.

Overall, there has been little movement in the level of updating library blogs, with 38.6% of library blogs updated within the previous three days in 2003, compared to 36.76% in 2006. There were similar results for updates within the previous week, 54.4% (2003) contrasted with 53.59% (2006), and within the previous month, 68.4% (2003) and 68.27% (2006). Clyde (2004a:103) commented that infrequent updating of library blogs gives blog readers little incentive to regularly visit, however, with the growth library blogs providing RSS feeds from 47.4% in 2003 to 67.61% in 2006, there may be little incentive for current library blogs to create daily content as any updated information will

automatically be redirected to an RSS subscriber. Hence, as long as blog readers utilise RSS technology, they will always be informed of new blog content.

Nevertheless, it is encouraging to see an increase in the number of library blogs providing an RSS newsfeed option, up from 47.4% in 2003 to 67.61% in 2006, and offering a range of different RSS subscription choices. Use of RSS further supports the purpose of a library blog to provide access to online news and resources. An RSS feed can potentially raise the online profile of the library, as the summary of content provided by an RSS feed is more easily picked up by search engines and other blogs (see Clyde, 2004a:136).

While Clyde (2004a:101) argued that having an RSS feed is “generally considered to be an indicator of intent to provide a serious service via a weblog and of the commitment to the weblog”, this may however no longer be the case, as the provision of an RSS feed is often included as a standard, rather than optional, feature of many blog software packages. Although it is difficult to determine whether RSS is still considered an accurate indicator of a library’s commitment to creating and maintaining a blog without further research on the actual use of RSS by library customers, McKlernan (2005) argues that the use of RSS by libraries indicates a shift towards the provision of personalised library services, where the increased use of news aggregators can potentially facilitate customised portals.

However, the creation of individualised connections between libraries and their customers can be problematic if there is no apparent association between libraries and their blog(s). Only 3 in 5 library blogs in 2006 (60.39%) clearly identified or linked to their respective libraries, which is a slight increase on the 2003 results of 52.6%. This is

somewhat disappointing and appears to be at odds with one of the key reasons for library and information services, which is to provide access to transparent and reliable information sources. Without clear identification of the library, its location and/or the staff creating the blog's content, the reliability and validity of the information provided by the library blog is compromised. This provision of information about where the library is located, a link to the library website or, at the very least, a link to the library catalogue, becomes "especially important" if, as stated by Clyde (2004a:96), a blog is "housed on a remote weblog hosting service [...], rather than on the library's own web server".

Given the apparent lack of interest in providing physical location details, it is therefore surprising to see that 28.07% of libraries in the 2006 sample population use the library blog to promote the library's physical materials. If a library customer is unclear about how and where to access the library's physical collection, due to a lack of detail about the library's location, it is strange to then promote its physical resources.

In 2003, Clyde (2004a:94) identified "provide news or information for users" as the most common purpose of library blogs. In 2006, library blogs continue to be used primarily as a means of communicating information to library customers. Library blogs are still heavily content-driven, as indicated by the most common purposes in 2006, which are sharing news about the library (58.21%), and the identification of external online resources (52.80%) and online news (43.79%). Similar to Clyde's 2003 research, many library blogs in 2006 have multiple purposes and uses.

Providing access to online information and news seems a logical use of the library blog, given the way in which the customer is interacting with the library, that is,

through a digital medium. If this is then the case, it then is somewhat contradictory that few libraries provide direct access to their own electronic resources. Encouraging independent information seeking behaviour through use of the library's digital resources does not appear to be a key use of the library blog, with few library blogs providing access to their own (internal) online resource, such as links to databases (14.88%), research guides (8.75%), e-journals (3.72%) and online dictionaries (1.75%). Nonetheless, none of these features appeared in Clyde's 2003 research (Clyde, 2004a:95).

It is still however unclear whether libraries have adopted blogs as a communication tool in an attempt to conduct two-way conversations with their customers, as suggested by in the early days of blogging Bausch *et al.* (2002:39) and recently reiterated by Scoble and Israel (2006:13), or simply as a less complicated way to have an online presence, given that anyone can post content to a blog with little or no understanding of the technology behind the interface. While 60.61% of library blogs have enabled the comments feature, allowing blog readers to engage directly with the library, there is little indication that library blog readers are actually using this feature. However, this is still definite increase from the 2003 results in the interactive features found on library blogs, where Clyde (2004a:97) reported that only 28.1% of library blogs included any type of interactive feature, including the comments facility.

Some libraries have taken specific advantage of the interactive online space that blogs encourage. In 2006, a few library blogs (1.97%) identified the solicitation of information and feedback through polls or surveys as a key purpose, while other libraries use library blogs as an online discussion space for a particular library customer group, such as a book group (2.84%) or a genealogy services discussion group (1.60%). However, these are relatively uncommon uses of library blogs.

Despite the considerable increase in population size of library blogs between 2003 and 2006, the presence of many features remains relatively static. For instance, in 2003, only 3.5% of library blogs had a disclaimer, and in 2006, it is still relatively low, with 5.25% providing a link to a disclaimer and 1.31% explicitly stating the disclaimer on the front page of the blog. The opportunity to subscribe to some form of e-newsletter or e-alert has dropped slightly from 2003 (10.5%) to 2006 (9.63%), however given the increase in the number of library blogs providing RSS feeds, it is surprising that so many library blogs still offer this facility.

Clyde (2004a:95) indicated that, in 2003, 17.5% of all library blogs had a link to at least one other blog, and while information about blogrolls was separated into library blogs which linked to internal blogs (16.41%) and those which linked to external blogs (8.32%) in the 2006 results, the rate of linking to other blogs is still relatively low. The presence/absence of a blogroll may be aligned with the purpose of a library blog. For example, a book discussion group blog may choose not to include links to other blogs, but may instead link with other internet resources, such as author and/or publisher websites.

Search facilities have also changed over the past three years, which is potentially a reflection in the growth and maturity of blogging software packages. Whereas Clyde's (2004a:95) results show that in 2003 only 24.6% of library blogs provided front page access to a blog search engine, in 2006 this had increased to 35.67% and another 4.38% provided a link to a blog search engine. Some library blogs in 2006 also provided a facility to search the entire website of the library that the blog was associated with (9.19%) and others supplied access to a web search engine (3.50%). So a greater number of blogs are providing a variety of search strategies for readers to access past content.

Clyde (2004a:95) does not indicate whether any library blogs provided a copyright statement, while in 2006, 10.50% provided a link to copyright information and another 3.94% provided a statement on the front page of the blog. This low level of public acknowledgement of content ownership suggests that libraries do not associate intellectual property rights with the blog as a library-owned and/or library-created publication. Libraries may view the blog as more of a filter and/or portal to publicly available online content, rather than a copyright-protected library publication.

New features have emerged on many library blogs since Clyde's 2003 research, most notably a range of social software applications, including online photo communities⁵⁹, social bookmarking⁶⁰, tag clouds, wikis and podcasts. Although the proportion of library blogs making use of these is still small, it is significant in that it illustrates the commitment of some libraries to share new technologies and build an online community space for its customer groups.

Hence, in many areas, library blogs have not altered dramatically since 2003, yet in other ways, there have been significant changes. Just as the global blogosphere continues to morph and expand, so to does the library blogosphere.

8.2 Other issues raised

The maturity of the global blogosphere is not necessarily confirmed by the enormity of the blogging community, but more so through the adoption and sophisticated use of blogs by numerous sections of society, including the education, media and corporate sectors. Just as the adoption of blogs as an integral part of business

⁵⁹ See <http://www.flickr.com> for an example of this type of online community.

⁶⁰ See <http://del.icio.us/> for an example of this type of social software application.

communication strategies by high-profile corporations such as General Motors (see Cone, 2005), the British Broadcasting Corporation (see Velkov, 2005), Sun Microsystems (see Cone, 2005; Schwartz, 2005b) and Microsoft (see Gordon, 2006) has given a sense of legitimacy to the use of blogs as a communication tool in a corporate setting, the successful integration by many libraries of blogs into their library branding, and the subsequent development of well-supported and active online user communities, has demonstrated the validity of blogs as a relevant communication strategy in the library and information sector. Libraries such as Georgia State University (see Goans and Vogel 2003; Goans and Vogel, 2005, Ann Arbor District Library (see Kenney, 2005), Darien Library and the University of Illinois Urbana Champaign illustrate the potential for library blogs to create a dynamic online environment for libraries to reach their diverse communities⁶¹.

The findings of this small-scale research project confirm a sizeable increase in the number of libraries employing blogs as part of their external communication strategy. The increase in library blog numbers is matched by an increase in the number and types of different features that libraries are using in their blogging endeavours. Although there is no authoritative list of required features for blogs, there are many features which are common to a high proportion of the library blog population sample, such as a name for the blog and access to past content through the inclusion of archives. And while over half of the active library blog population use blogs primarily as a way to share news and information with their communities, the diversity of other purposes and uses, as well as the variety of blogging software and hosting options, demonstrates that there is no set formula or uniform requirements for building effective and successful blogs.

⁶¹ See Appendix II for relevant library URLs.

However, as Etches-Johnson (2005:41) argues, “it would be naïve to assume that a weblog is the answer to every library’s marketing and outreach endeavors”, and this is supported by the number of inactive blogs located in the early stages of this research study. For these libraries, it appears that blogging may not have been a rewarding experience.

Although library blogs are a potentially dynamic way of engaging with the library community and providing ongoing, online customer service, a library’s community groups are not well served by a library blog which has little or no information about the library, its staff, its location, or its collections and resources, and has no clearly defined statement of purpose or even a link to the library website. A library customer may dismiss the usefulness of a library blog which is updated infrequently and which does not provide transparency and/or access to useful and reliable information.

Hence, the researcher agrees with Clyde’s original conclusion (see Clyde, 2004a), that, just like any other form of library communication and marketing, library blogs should have an identified purpose for an intended audience, and should be appropriately managed, including the allocation of sufficient budget, time and staff resources. They should also be regularly evaluated to ensure that the library blog continues to meet its objectives, and/or adapted to the changing needs of its consumer group(s).

With the confirmation that blogging is a part of many libraries’ online communication activities, further research can now be conducted to increase the scholarly knowledge base about how and why libraries choose blogs as part of their online communication strategy. The next stage of research should be in-depth investigations into the use of blogs by libraries, investigating what determines their

decision to use blogs as a communication tool, what influences their selection of software and/or hosting options, and what factors play a role in the success, failure and continued development of blogs in a library context. Publication of examples of best practice, as well as qualitative research which evaluates blogs and blogging in a library environment, will further enhance the library and information sectors' understanding of blogs and illustrate how social software such as blogs can complement and improve library products and services.

8.3 Further research

Despite the continued appearance of articles promoting blogging in the professional library literature, there is a shortage of scholarly research about blogs in the field of library and information science. Hence, there is a wealth of topics for further investigation. While this research project has determined that the library blogosphere has grown substantially since 2003, there are a large number of aspects to the library blogosphere that were not examined as part of this small-scale research project.

The issue of active/inactive blogs is an area for further analysis. What causes blog abandonment? Is staff attrition the main cause of blog discontinuation? Why has blogging not been a successful endeavour for some libraries? Do discontinued blogs remain a useful online resource for the library community?

This research project identified growth in English language library blogs, however, it is not clear whether any research has been conducted regarding non-English language blogs, in any sector. If research has been undertaken, it has not yet been translated and published in English.

Le Meur (2005) produced an overview of the overall European blogosphere, however, this was based on anecdotal evidence provided by a number of European contributors rather than through rigorous scholarly research. As there are library blogs in other languages listed on both *The Blogging Libraries Wiki* and *Libdex*, this could also be an area for further investigation. Scoble and Israel (2006) believe that cultural factors may potentially influence blogging use within different language communities. Do cultural factors have an effect on library blogs produced in other languages? Do different language communities use library blogs in different ways?

Blogs used for internal library communication between staff were excluded from this research project, yet there is evidence to suggest that this is a potential growth area in the field of library and information science. Munoz (2004) indicated that an internal blog was useful for sharing information between librarians of a law firm with offices in different countries. Singer Gordon and Stephens (2006) recently advocated the use of blogs for internal staff communication in libraries. As at 22 September, 2006, *The Blogging Libraries Wiki* listed twenty-six publicly accessible internal library blogs. It seems highly likely that a number of other libraries also use internal blogs as a password-protected communication tool, located behind a corporate firewall.

Blogs produced by other members of the library and information science community were also excluded from this research project. Professional organisations, such as regional and national Library Associations, are also creating blogs, as indicated in a separate listing on *The Blogging Libraries Wiki*. These blogs appear to be intended for communication with a specific audience, that is, the professional library community. What determines whether a professional library organisation chooses to deliver

information to their key user group in this manner? Do librarians utilise the information communicated on professional blogs?

Integration of blogs with library branding is another area for investigation. Although 60.39% of library blogs did a link to the library that they represented, it would be interesting to examine whether the reverse is true, do libraries provide a link from their main web page to their library blog(s)? How do libraries promote library blogs to customers? What are the most successful methods of encouraging customer use of library blogs? Do any libraries include a library blog URL as part of their contact details on stationery and business cards?

Research into the outcomes of targeted promotion and marketing of library blogs to a particular customer group may also provide useful information for the library and information sector. What are the most effective ways to market library blogs to increase readership and participation? Does staff participation in the development and ongoing involvement with library blog maintenance influence how a library blog is marketed to customers? Would library customers benefit from specific workshops to educate and demonstrate why the library has chosen blogs as a communication tool? Would library customers benefit from focussed training sessions on the uses of blogs and other social software?

Another area for potential study which could provide valuable information about library blogs would be the frequency of posting on library blogs. This research study was limited in scope and did not include this aspect of library blog posts as a variable for investigation; however, a longitudinal study of the frequency of blog posting over a set period of time, such as six or twelve months, may offer greater insight into use

of library blogs as a communication tool. What influences a library to post frequently?
Does frequency of posting have an impact on the number of blog readers?

There is one important area which remains almost totally unexplored, and that is the evaluation of library blogs, from both library staff and library user perspectives. Although some libraries have shared their experiences of setting up library blogs (see Goans and Vogel, 2003; Goans and Vogel, 2005; Blair and Cranston, 2006), including the rationale behind their choice of blogging software and the intended purpose of the library blog, there has been little reporting of any scholarly research into the perceived and actual effectiveness of blogs as a communication tool. As blogging is relatively new for many libraries, this type of research may not appear for some time. However, some libraries were very early adopters of library blogs as a communication tool and the publication of their evaluation information may enable other libraries to benefit from knowledge about successes and potential mistakes, and incorporate this into their own development of blogging and social software.

Gaining an understanding of the overall use of blogs by the library's customers could provide a library with valuable information about the usefulness of its library blog(s). Libraries could investigate how a customer came into initial contact with the library blog(s), how and why they use the library blog(s) and whether the library blog is one of many blogs that they regularly consult or whether it is the only one that they consult as part of their connection with the library. Further exploration of the actual blog reader community is needed to verify whether the actual blog audience matches the intended blog audience and whether blog readers value the information and resources shared through the library blog.

Although blogging can be viewed as a relatively recent social and technological phenomenon, it is a key early development in the social software revolution and could therefore potentially be described as ‘mature’ social software product. There is sufficient anecdotal evidence that blogging will continue to play an important role in many people’s lives, hence it is important to create a base of scholarly research investigating the uses and impacts of blogging in the field of library and information science. Further investigations about blogging could also be combined with research into the increasing use, and subsequent impact, of newer social software, such as podcasting and RSS, in the field of information and library science.

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Appendices

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| Appendix I | Online resources used to locate library blogs |
| Appendix II | Library blogs and libraries referred to in this research report |
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| Appendix IV | Online resources referred to in this research report |
| Appendix V | Collated data results |

Appendix I

Search engines and blog directories used to locate library blogs

All links checked and determined to be working on 3 October, 2006.

AustralianBlogs.com.au	http://www.buggerall.com.au/tags/
BlogBib	http://blog-bib-liblogs.blogspot.com/
BlogFlux	http://dir.blogflux.com/
Blogwise	http://www.blogwise.com/
BlogSearchEngine	http://www.blogsearchengine.com/
dmoz Open Project Directory	http://dmoz.org/Reference/Libraries/Library and Information Science/Weblogs/Organizational Weblogs/
EatonWeb Portal	http://portal.eatonweb.com/
Feedster	http://www.feedster.com/
Internet Public Library:Blogs	http://www.ipl.org/div/blogs/
Getblogs	http://www.getblogs.com/
Gigablast	http://blogs.gigablast.com/
Globe of Blogs	http://www.globeofblogs.com/
Google Blog Search	http://blogsearch.google.com/
Google (Australia)	http://www.google.com.au
Google (Canada)	http://www.google.ca
Google (Ireland)	http://www.google.ie
Google (NZ)	http://www.google.co.nz
Google (South Africa)	http://www.google.co.za
Google (UK)	http://www.google.co.uk
Google (USA)	http://www.google.com
Libdex	http://www.libdex.com/weblogs.html

Technorati

<http://technorati.com/>

The Blogging Libraries Wiki

[http://www.blogwithoutalibrary.net/links/index.php?title=Welcome to
the Blogging Libraries Wiki](http://www.blogwithoutalibrary.net/links/index.php?title=Welcome_to_the_Blogging_Libraries_Wiki)

Appendix II

Library blogs analysed prior to overall data coding

All links checked and determined to be working on 3 October, 2006.

Library News Ann Arbor District Library.

Available at: <http://www.aadl.org/taxonomy/term/60>

Library News Georgia State University.

Available at: <http://www.library.gsu.edu/news/index.asp?typeID=1>

First Reading Hawaii Legislative Reference Bureau Library.

Available at: <http://www.hawaii.gov/lrb/libblog/>

Library News Whippany Park High School.

Available at: <http://whippanylibrarynews.blogspot.com/>

What's New! University of Richmond.

Available at: <http://urlibrary.blogspot.com/>

Katonah Village Library Blog.

Available at: <http://kv1125.blogspot.com/>

Libraries referred to in this research report

All links checked and determined to be working on 3 October, 2006.

Ann Arbor District Libraries <http://www.aadl.org/>

Darien Library <http://www.darienlibrary.org/>

Georgia State University <http://www.library.gsu.edu/news/>

University of California, Berkeley <http://www.lib.berkeley.edu/>

University of Illinois Urbana Champaign

<http://www.library.uiuc.edu/>

Appendix III

Blogging software referred to in this research report

All links checked and determined to be working on 3 October, 2006.

Blog-City	http://www.blog-city.com/bc/
Blogger	http://www.blogger.com/start
Blogsome	http://www.blogsome.com/
Blosxom	http://www.blosxom.com/
CityDesk	http://www.fogcreek.com/CityDesk/
Drupal	http://drupal.org/
ePress	http://www.ePress.ac.uk/
Expression Engine	http://www.pmachine.com/
Greymatter	http://noahgrey.com/greyssoft/
iBlog	http://www.iblog.com/home.php
LiveJournal	http://www.sixapart.com/livejournal/
Manila	http://manila.userland.com/
mo'time	http://www.tipic.com/blogs
Movable Type	http://www.sixapart.com/movabletype/
Radio Userland	http://radio.userland.com/
Slashcode	http://www.slashcode.com/about.shtml
Tinderbox	http://www.eastgate.com/Tinderbox/
Trumba	http://www.trumba.com/corp/default.aspx
TypePad	http://www.sixapart.com/typepad/
Weblogs.us	http://weblogs.us/
WordPress.org	http://www.wordpress.org
WordPress.com	http://wordpress.com/
Zope	http://www.zope.org/

Appendix IV

Blogs referred to in this research report

All links checked and determined to be working on 3 October, 2006.

MetaFilter <http://www.metafilter.com/>

Slashdot <http://slashdot.org/>

Social Software referred to in this research report

All links checked and determined to be working on 3 October, 2006.

Del.icio.us <http://del.icio.us/>

Spurl <http://www.spurl.net/>

Furl <http://www.furl.net/>

Library Thing <http://www.librarything.com/>

Flickr <http://www.flickr.com/>

Technorati <http://www.technorati.com/>

MySpace <http://www.myspace.com/>

YouTube <http://www.youtube.com/>

Facebook <http://www.facebook.com/>

Allconsuming <http://www.allconsuming.net/>

News aggregators referred to in this research report

All links checked and determined to be working on 3 October, 2006.

Bloglines <http://www.bloglines.com/>

Feedburner <http://www.feedburner.com/fb/a/home>

Feedster <http://www.feedster.com/>

Newsburst <http://www.newsburst.com/>

Newsgator <http://www.newsgator.com/home.aspx>

Rosa

http://www.jisc.ac.uk/whatwedo/programmes/programme_pals/project_rosa.aspx

Personalised web services referred to in this research report

All links checked and determined to be working on 3 October, 2006.

My AOL	http://feeds.my.aol.com/
My Google	http://www.google.com/ig
My MSN	http://my.msn.com/
My Yahoo!	http://my.yahoo.com/
Pluck	http://www.pluck.com/

Other online services and products referred to in this research report

All links checked and determined to be working on 3 October, 2006.

“Bobby” software	http://webxact.watchfire.com/
The World Wide Web Consortium (W3C)	http://www.w3.org/

Appendix V

Features

	Academic	Public	School	Special	Total	%
Total no. of libraries	218	188	22	29	457	
Blog name	214	182	20	27	443	96.94%
Sub-heading of blog - quote	1	1	3		5	1.09%
Sub-heading of blog - statement about blog	87	54	12	20	173	37.86%
Library/institution - full name listed	141	105	16	21	283	61.93%
Library/institution - acronym listed	59	32	4	6	101	22.10%
Street address - listed on front page	27	28	2	3	60	13.13%
Phone number - listed on front page	25	36	2	6	69	15.10%
Name of library staff listed	18	12	8	1	39	8.53%
Name(s) of blog contributors - listed on front page	41	21		1	63	13.79%
Name(s) of blog contributors - link	6			1	7	1.53%
Hours listed	1	9	1	4	15	3.28%
Hours - link	17	3	2	1	23	5.03%
Address - link	6	2		1	9	1.97%
About me - statement on front page		4			4	0.88%
About me - link to "view my complete profile"	22	35	4	4	65	14.22%
"Contact us" - link	61	29	5	9	104	22.76%
Email address - listed on front page	23	10	3	1	37	8.10%
Media liaison staff contact details - listed			1	1	2	0.44%
Help - link	26	42		4	72	15.75%
"About library" - link	52			7	59	12.91%
"About library" - statement on front page	23	5	5	8	41	8.97%
"About blog" - link	42	8	11		61	13.35%
"About blog" - statement on front page	11	11			22	4.81%
					0	0.00%
Calendar	38	9	1	4	52	11.38%
Link to calendar	6	2	2	2	12	2.63%
Links to upcoming activities and events	29	89	1	5	124	27.13%
Posts titled	199	182	20	28	429	93.87%
Date of Posting	205	184	20	27	436	95.40%
Year of Posting	201	184	20	26	431	94.31%
Time of Posting	158	176	16	17	367	80.31%
Name of Poster	152	121	17	20	310	67.83%
Link to most popular posts	5				5	1.09%
Recent/previous entries - listed in side bar	99	105	13	14	231	50.55%
Recent/previous entries - link	5	5			10	2.19%
Link to show entire post	11	38		5	54	11.82%
Archive - listed on front page	197	126	19	25	367	80.31%
Archived by day		1			1	0.22%
Archived by date	28	13	4		45	9.85%
Archived by week		2			2	0.44%
Archived by month					0	0.00%
Archived by year	1	1			2	0.44%

	Academic	Public	School	Special	Total	%
Archived by month/year	180	118	15	21	334	73.09%
Archived by category	6	1			7	1.53%
Archived by author	1				1	0.22%
No. of blog posts in each archive period - listed	18	2			20	4.38%
Archives - link	29	9		4	42	9.19%
Archives - searchable by date and/or category	27				27	5.91%
Permalink - enabled	61	15	3	5	84	18.38%
Trackback - enabled	18	18	3	9	48	10.50%
Tags listed with post		4			4	0.88%
Categories associated with post - listed with blog post	93	18	4	9	124	27.13%
Categories associated with post - listed in side bar	92	40	5	11	148	32.39%
Categories associated with post - listed in side bar with timeframe since posting	2	1			3	0.66%
Number of blog posts associated with category - listed in side bar	36	5			41	8.97%
Categories - link	19			1	20	4.38%
Comments - enabled	108	140	14	15	277	60.61%
Comments - listed with blog post		2			2	0.44%
Comments - link	107	140	14	15	276	60.39%
Recent comments - listed with timeframe since posting	2				2	0.44%
Number of comments - listed with blog post	103	135	12	15	265	57.99%
Number of times post read - listed with blog post	4	1			5	1.09%
Links in blog post to sources of information	178	136	7	22	343	75.05%
Credit for photographs/images	1	1			2	0.44%
Institutional webpage - link	108		6	12	126	27.57%
Information about institutional admission process - link	6				6	1.31%
Information about institutional student life - link	8				8	1.75%
Institutional department(s) - link	43				43	9.41%
Library webpage - link	172	91	8	5	276	60.39%
Library catalogue - link	70	86	5	9	170	37.20%
Link to FAQs	14	7			21	4.60%
Generic link to online library resources	39	9		9	57	12.47%
Link to other library resources - databases	36	21	4	7	68	14.88%
Link to other library resources - e-journals	16	1			17	3.72%
Link to other library resources - inter-library loan	10	7	1		18	3.94%
Link to other library resources - internet resources	35	37	5	18	95	20.79%
Link to other library resources - reference materials (Dictionaries)		3	4	1	8	1.75%
Link to other library resources - reference materials (Encyclopedias)	2	4	4	1	11	2.41%
Generic link to online reference resources		35	1	1	37	8.10%

	Academic	Public	School	Special	Total	%
Link to other library resources - research guide(s)	38	2			40	8.75%
Link to other library resources - help with web searching	4	1	4	1	10	2.19%
Link to other library resources - citing sources	5	1			6	1.31%
Link to other library resources - dissertations	1				1	0.22%
Link to other library resources - faculty publications	1				1	0.22%
Generic link to online research resources		11			11	2.41%
Link to library instruction resources - 'how to use library'	17	6			23	5.03%
Link to 'homework help' online resources		12			12	2.63%
Link to WorldCat	1	2			3	0.66%
Link to Library of Congress	1	1			2	0.44%
Link to other library services	67	45		4	116	25.38%
Link to new library resources	21	11			32	7.00%
Link to library user (borrower) information - My Library, renew books, my account, reserves	14	53		2	69	15.10%
Link to library news	11	6	1	5	23	5.03%
Link to library publications (incl. library newsletters)	21	7		5	33	7.22%
Link to 'Ask a Librarian'	71	25	2	3	101	22.10%
Link to items in library catalogue	6	50		1	57	12.47%
Link to press releases	1	2			3	0.66%
Link to ListSers	1				1	0.22%
Link to News Groups	1				1	0.22%
Link to online book reviews	4	16	8	1	29	6.35%
Link to online news (local)	7	1	1	3	12	2.63%
Link to online news (national)	15	2		1	18	3.94%
Link to online news (international)	22	4	1	3	30	6.56%
Link to 'all consuming'		1			1	0.22%
Link to 'youtube'		1			1	0.22%
Link to or use of del.ici.ous tags	4	10	1		15	3.28%
Link to or use of flickr.com	4	15	1		20	4.38%
Link to technorati	4	9			13	2.84%
Link to facebook	2				2	0.44%
Link to myspace	2	5			7	1.53%
Link to institutional wiki	2	1		1	4	0.88%
Link to 'what is a wiki?' explanation		1			1	0.22%
Link to podcasts		4			4	0.88%
Link to explanation of podcasting	1	1			2	0.44%
Link to podcast archive	3				3	0.66%
Link to spurl		1			1	0.22%
Link to LiveJournal syndication	3				3	0.66%
Link to furl	1	2			3	0.66%
Link to 'what is social bookmarking or tagging?'	1				1	0.22%
Link to Library Thing	1	3			4	0.88%
Link to 'random books from my library'	1	2			3	0.66%
Facility to listen to this blog/blog post	3				3	0.66%

	Academic	Public	School	Special	Total	%
Explanation of on front page how to leave a comment		2			2	0.44%
Copyright statement	24	12	2	10	48	10.50%
Link to copyright statement	16	1		1	18	3.94%
Link to library policies and procedures	5	3			8	1.75%
Link to blog and/or website policies	4	7		3	14	3.06%
Disclaimer	5	1			6	1.31%
Link to disclaimer	18	1		5	24	5.25%
Link to privacy statement	3	1		3	7	1.53%
Link to comment guidelines	2	2		1	5	1.09%
Link to Campus Map	2				2	0.44%
Statement of library values			1	1	2	0.44%
Statement of institutional values	1				1	0.22%
Facility to suggest a resource	4	3	2		9	1.97%
Links to resources for institution staff	20		3	3	26	5.69%
Links to resources provided for students by institution staff	2				2	0.44%
Link to local public library	2		4		6	1.31%
Link to other blogs	2	1			3	0.66%
Blogroll - lists internal institutional blogs	21	46	4	4	75	16.41%
Blogroll - lists external blogs	21	12	1	4	38	8.32%
Link to 'more about' library blogs	9				9	1.97%
Link to 'blogs that link here'	2	8			10	2.19%
RSS (syndication/site feed) link	173	109	5	22	309	67.61%
About RSS - Explained on front page	5	3		4	12	2.63%
Link to explanation of RSS	67	18		2	87	19.04%
Subscribe to blog via Bloglines button	21	15			36	7.88%
Subscribe to blog via other aggregator services	50	14			64	14.00%
List of or link to other RSS feeds available	16	2			18	3.94%
Facility to subscribe to e-newsletter/e-alerts/e-notifications	20	16		8	44	9.63%
IM contact(s) listed		7			7	1.53%
IM status	2	10			12	2.63%
Country Identified	24	22	3	6	55	12.04%
State/Region/County identified	75	66	8	11	160	35.01%
Town identified	57	88	7	3	155	33.92%
Institution identified	165	112	16	24	317	69.37%
Search (web or site) - link	7	9		4	20	4.38%
Search engine - search blog	113	28	5	17	163	35.67%
Search engine - web search	7	6	2	1	16	3.50%
Search engine - choice of different options		3	2		5	1.09%
Search library website	4	38			42	9.19%
Search library catalogue	5	8			13	2.84%
Search Tips		1		1	2	0.44%
Search University Website	3				3	0.66%

	Academic	Public	School	Special	Total	%
Link to Site map	36	5		1	42	9.19%
Link to Site index	24	1			25	5.47%
Site meter	34	28	5	7	74	16.19%
List of blog statistics (no. of visitors/members, most recent entry/comment, total entries/comments)	1			1	2	0.44%
Number of users online indicated	1			3	4	0.88%
Link to webpage stats	1				1	0.22%
Link to blog statistics		2			2	0.44%
Link to list of website changes		2			2	0.44%
Most popular library catalogue search terms	1				1	0.22%
Link to low-bandwidth display	1				1	0.22%
Link to Email this page to a friend	3	3		1	7	1.53%
Link to Change text size	6	2		1	9	1.97%
Link to Printer-friendly version	8			1	9	1.97%
W3C compliance indicated by button	3	1			4	0.88%
"Bobby Approved site" button		2			2	0.44%
Option to change colours of screen		1			1	0.22%
Link to town's website		6			6	1.31%
Link to local government website		4			4	0.88%
Link to local schools		8			8	1.75%
Link to information about town and/or area		4			4	0.88%
Link to map/directions		3			3	0.66%
Link to drop box locations		1			1	0.22%
Link to local weather information		2			2	0.44%
Log in facility	35	52			87	19.04%
Link to 'kids' library services		18			18	3.94%
Link to 'teens' library services		25			25	5.47%
Link to 'adult' library services		3			3	0.66%
Link to 'senior' library services		3			3	0.66%
Link to 'audiobooks'		8			8	1.75%
Link to 'online bookstore'		4			4	0.88%
Link to teen advisory board/group		13			13	2.84%
Link to 'parents' page		2			2	0.44%
Link to 'yahoo avatars'		1			1	0.22%
Link to 'runescape'		1			1	0.22%
Link to 'graphic novels'		1			1	0.22%
Link to sports online resources		2			2	0.44%
Link to entertainment online resources		5			5	1.09%
Link to 'Books in Print'		1			1	0.22%
Link to 'summer reading programme(s)'		4			4	0.88%
Link to summer reading lists/programmes		3			3	0.66%
Link to library discussion forums		1			1	0.22%
Link to bookgroup reading guides		3			3	0.66%
Space to ask question to other blog users - book discussion questions		1			1	0.22%
Link to online book discussion groups		2			2	0.44%

	Academic	Public	School	Special	Total	%
Link to library book groups		3			3	0.66%
Book reviews	8	37	11	1	57	12.47%
Links to book reviews	3	15	10	1	29	6.35%
Link to author webpage/blog		8	3		11	2.41%
Links to publishers webpages		1	1		2	0.44%
Link to 'find a good book'		8			8	1.75%
Links to browsers, spyware, webapplications		2			2	0.44%
Donation facility				3	3	0.66%
Support the library		27			27	5.91%
Link to equipment sale		1			1	0.22%
Link to Friends of the Library	1	7			8	1.75%
Link to other language version (Spanish)		2			2	0.44%
Link to jobs and/or career info		5			5	1.09%
Link to 'where I find my sites/sources'		1			1	0.22%
Link to 'first time here? read this'		2			2	0.44%
Link to online movie previews		1			1	0.22%
Movie reviews by library staff		1			1	0.22%
Link to community outreach		1			1	0.22%
Link to local history resources		15			15	3.28%
Link to genealogy resources		14			14	3.06%
Link to staff favourites		3			3	0.66%
Side bar - what I am reading		1			1	0.22%
Side bar - what I am watching		1			1	0.22%
Side bar - what I am listening to		1			1	0.22%
Books that I want to read		1			1	0.22%
Map showing where blog visitors are coming from		1			1	0.22%
Link to blog and/or internet safety online resources		2			2	0.44%
Link to 'college' information		1			1	0.22%
Link to Technological Support	1	2			3	0.66%
Link to Library Board		1			1	0.22%
Featured Event shown on front page		38			38	8.32%
Featured library service shown on front page		38			38	8.32%
Link to Institutional Archives		1			1	0.22%
Link to University Archives Collections	1				1	0.22%
Facility to make a suggestion/give feedback	16	2			18	3.94%
Secure URL site (https://)	1				1	0.22%
Video material posted	3	3			6	1.31%
Photographs/Images posted	36	66	9	7	118	25.82%
Images of books/dvds/cds - covers posted	15	63	10	2	90	19.69%

Software

	Academic	Public	School	Special	Total	%
Blogging Software - identified on site	131	116	18	16	281	61.49%
Blogging Software - identified by URL	78	78	14	11	181	39.61%
Blogging Software - identified by logo which precedes URL	58	69	15	11	153	33.48%
Template identified	6	3	3		12	2.63%
Design credited	5	5			10	2.19%

Purpose(s) and use(s)

	Academic	Public	School	Special	Total	%
News about library (incl. construction updates and hours)	142	107	8	9	266	58.21%
Identification of external online resources relevant to user group (incl. blogs)	144	78		17	239	52.30%
Identification of external online news relevant to user group	115	84		1	200	43.76%
Promote library's digital resources	125	53		2	180	39.39%
Promote upcoming events (incl. library instruction classes; book group meetings)	63	104		8	175	38.29%
Promote library's physical materials	55	73			128	28.01%
News about library staff (incl. job vacancies)	59	52		4	115	25.16%
Review of new material added to library collection	30	68		2	100	21.88%
List of or link to new library resources	63	23	5	4	95	20.79%
Technical information (catalogues outages, password changes)	61	2			63	13.79%
Summer reading programmes and information	2	41	3	1	47	10.28%
Information about librarian-related events and news	21	9		9	39	8.53%
Discuss legal developments	12			7	19	4.16%
Discuss books for children	1	14	1		16	3.50%
Book group discussion	1	10	1	1	13	2.84%
Conduct polls and/or solicit customer survey feedback	4	5			9	1.97%
List of news headlines	5	1			6	1.31%
List podcasts	5	1			6	1.31%
Press releases	1	2		2	5	1.09%
Promote technology		5			5	1.09%
Summer reading programme book discussion space		5			5	1.09%
Information and resources for distance students	3				3	0.66%
School book lists			1		1	0.22%
Notes to accompany library instruction classes	1				1	0.22%
Information for institutional staff and students about blogs	1				1	0.22%
Information about planning process for managing local geographical resource	1				1	0.22%

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