

Use of Web2.0 tools by academic libraries

Dr.Manorama Tripathi

Documentation Officer

Indira Gandhi National Open University, New Delhi, India

Phone-(011) 41671179

Email: manoramatripathi2@yahoo.com

Abstract:

Web 2.0 tools are Internet based services which include social net working sites, blogging sites, RSS, pod casting, wikis, 3D virtual environment such as second life and Active world. These services aim to accelerate creativity, support information sharing, online collaboration and networking among the users.. The use of web 2.0 tools has grown considerably in the education sector in the last few years. They are being emphatically and overwhelmingly adopted by the conventional age students and the digital netizens. The libraries have also embarked upon harnessing the potential of these applications for enhancing the services.

The present paper discusses the application of these tools in the libraries .It provides a reconnaissance of major academic libraries across the globe which have embraced these tools for connecting to the users. It discusses how Web2.0 tools can be used to woo patrons towards using the library resources and services. These can be of tremendous help for providing services to the distance learners. It also dwells upon how the library professionals can use them to keep abreast with the latest developments in the field.

The paper also highlights how these tools –blogs, RSS and Face book are being used at Library and Documentation Division, Indira Gandhi National Open University, India. Indira Gandhi National Open University (IGNOU) is one of the largest open universities of the world. It was set up by an Act of Parliament in 1985. It caters to the educational aspirations of about 2 million students.

Keywords: Web 2.0; Library services; IGNOU; distance learners

Introduction

In the recent past the Web2.0 has gained tremendous importance. The term "Web 2.0" refers to the second generation development and design of web that aims to facilitate communication, secure information sharing, interoperability, and. Web 2.0 concepts have led to the development and evolution of web-based communities, hosted services, and applications such as social-networking sites, video-sharing sites, wikis, blogs, and folksonomies. (http://en.wikipedia.org/wiki/Web_2.0)

Objectives of the study

The objectives of the present study are as under:

- To identify web tools used by the academic libraries
- To study the purpose of using these technologies.
- To examine the characteristic features of the web 2.0 tools used in the academic libraries

Development and use of research instrument

The literature review has not revealed availability of any set parameters or standards for evaluating web 2.0 tools. The parameters used in the present study are based on the checkpoints used by McIntyre and Nicole(2007)for evaluating Library pod casts and the checkpoints given by Linh,Nguyen Cuong (2008) for evaluating various web 2.0 tools. It is also being mentioned here that certain checkpoints were arrived at after visiting and browsing the various sites. The list of checkpoints, which are 77 in number, is attached at the end.

Research Methodology

The methodology of content analysis has been used in the present work.

Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts. Content analysis is a methodology in the social sciences for studying the content of communication. Earl Babbie defines it as "the study of recorded human communications, such as books, websites, paintings and laws." It is most commonly used by researchers in the social sciences to analyze recorded transcripts of interviews with participants. (http://en.wikipedia.org/wiki/Content_analysis)

The method of convenience sampling was used for this study. This is the method of choosing items in an unstructured manner from the population frame. This method is often used during preliminary research efforts to get a gross estimate of the results, without incurring the cost or time required to select a random sample.

The sample for the study included the academic libraries of the four countries which are shown in the table given below:

TableNo1: Libraries included in the Study

| S.No | Name of the Country | Number of libraries |
|------|---------------------|---------------------|
| 1 | United Kingdom (UK) | 82 |
| 2 | USA | 151 |
| 3 | Canada | 37 |
| 4 | Australia | 07 |
| | | Total-277 |

The (libraries of the)universities which are listed at the following sites were surveyed for the present study :

- <http://www.scit.wlv.ac.uk/ukinfo/#>
- <http://www.utexas.edu/world/univ/state/>
- <http://university-canada.net/>

Review of Literature

Web 2.0 tools allow users to create, describe, post, search, and communicate online content in various forms – which range from music, bookmarks to photographs and documents. (Macasskill and Owen,2006)

The literature also reveals that Web 2.0 tools have an all pervasive impact through out the society. Bindsell (2007) stresses that web 2.0 is more of a social movement.

Web 2.0 is not any advancement in technology. Miller(2005)opines that the people are hyping the Web2.0 and Notess (2006) asserts that web 2.0 indicates a second wave of web techniques which makes information sharing g, dissemination and collaboration among the users more interactive. Davis has referred to web 2.0 as an attitude not a technology. Franklin and Van Harmelen,2007 have called it a technology change. Downes(2005) call it a social revolution. Virkus(2008) states that these tools and services facilitate new myriad opportunities of connectivity, communication and collaboration and sharing of information. The Library staff should encourage and promote and educate the teachers about the power and pedagogical opportunities offered by web2.0(Cohen,2008)The web2.0 in general and blogs in particular can be used for marketing library services(Draper, Lani and Turn age)

Chu and Meulemans(2008) report that online social networking sites are very popular among the students. They highlight that Myspace, Facebook-two widely adopted social networking sites can be used in university libraries for imparting library instruction, reference and outreach.

The literature survey shows that most of the experts have highlighted the web 2.0 and s applications. Many of the experts have asserted that it is more of a social phenomenon than a major stride in technology.

The application of Web 2.0 in libraries and information centres is popularly known as Library 2. (Miller,2006;Notess,2006)

Web 2.0 is proving to be engines of change for academic libraries. These tools help library professionals organize their materials, enhance services towards the users and internal functions. The

application of these tools also increases demand for services in virtual environment. (Kajewski,2007).These tools can be actively used for imparting information literacy (Marsha,2008)

Bradley,2007, Haffman,2006 and King and Porter ,2007) have highlighted how the web 2.0 tools can be used for enhancing library services.

The Horizon Report (2007) has highlighted that web 2.0 tools like user- create content; social networking, mobile phones will have a considerable influence on higher education.

The ACRL research committee has highlighted that the web 2.0 tools and technologies will offer new opportunities for the design and delivery of library resources and services but will also make more demands on Library staff and system. (Tedd,2008)

Bradley (2007) states that the libraries should explore novel ways through the use of web 2.0 of communicating and attracting the users.

Miller has keenly advocated the use of web2.0 by libraries. These can be used for serving the users in a better manner and attracting the potential users towards the Library. Miller further cautions that if the libraries don't use the tools to enhance the services, they are likely to be ignored by the users.

The web 2.0 tools which can enhance library services are wikis, blogs, RSS, IM ,pod casts and vodcasts. This view is being echoed by Maness,2006b;singer and Sherrill,2007;Mascaskill and Owen,2006.(Linh,Nguyen Cuong ,2008) has studied the application of web2.0 and their features in 32 Austrasian libraries. Huwe(2006) has highlighted that an element of personal touch can be introduced in outreach services through the use of web2.0 tools. In the same study, Huwe has studied how blogs can be used for personalizing libraries' outreach services.

The libraries can use blogs as promotional tools to inform clients of changes and additions to library services and collections. The Economist highlight that the social networking has a deep impact on education and indirectly on libraries as the libraries support education process.

(www.economist.com/debate.)

Belinda Weaver (2003) and Michelle Alcock(2003) state that blog is a wonderful tool for informing readers of changes, additions and developments in the Library. Clyde (2004) studied 55 web logs and found that those were used for providing news, information and links to the Internet resources for library users. Clyde highlighted that very few of them provided interactive services and less than half of them provided RSS feeds. Stephens (2006) states that the Library blogs. Stephens (2006) states that the library blog can be used as tools for getting feedback from the users on important aspects and transparency can be maintained in the organization. Frumkin (2005),Chawner and Lewis(2006),Clyde(2005and Stephens(2006) have studied the importance and application of wikis in the libraries.

The literature review reveals that the use of Web 2.0 in the libraries is increasing at an astonishing pace. The tools like blogs, RSS feeds, IM are used by the libraries very commonly; whereas the use of wikis is still to pick up. These tools may be used by the libraries for personalizing outreach services. The application of these tools may help libraries offer their resources and services to the users in a proactive manner.

Data Analysis

The data was collected according to the checkpoints suggested by various authors for evaluation .Each check point was allotted a value 1or 0 according to yes/or no answer. The values were entered in Excel spreadsheets. The "application index" of each library was calculated by the following formula:

$$\text{Application Index} = \frac{\text{Total of Yes answers}}{\text{Total number of Checkpoints}} \times 100$$

An application index indicates the degree of adoption of Web 2.0 application in a specific library. (Linh, Nguyen Cuong, 2008)

Types of Web2.0 tools

Table No.3: Use of Web2.0 tools

| S.No | Types of Web2.0 tools | %of libraries |
|------|-------------------------|---------------|
| 1 | RSS | 39.34 |
| 2 | Blog | 43.60 |
| 3 | IM | 53.08 |
| 4 | Podcasts | 11.00 |
| 5 | Social networking sites | 14.23 |

The Table No.3 given above shows that the most commonly used tool was Instant Messaging(IM)-it was adopted by 53.08% of the libraries. This facility was offered to the students for limited hours. This tool is very important and more and more libraries should adopt it for providing virtual reference services to the users. The biggest advantage of this tool is that the users get their queries attended to immediately.

The blogs were used by 43.60 % of the libraries. The use of blogs is gaining immense popularity; these are very easy to maintain and do not require much of time or effort; another strong feature is availability of free hosting soft wares.

R SS (Rich Site Syndication) tool was used by 39.34% of the libraries. The popularity of RSS may be attributed to its simplicity and easy to use feature. The users can subscribe to the RSS feeds which cater to their academic and research needs. For example, the Library of university of Southampton provides a variety of RSS news feeds to keep users up to date with what is going on around the University. The news feeds are available from School of Music news, University library news and so forth.

The podcast/vodcast was the least used tool-it was found that just 11% of the libraries used it. This may be due to the fact that the use of podcast/vodcast requires sound recorders, soundproof rooms. The audio and video files are too big and take too much of time to download or listen to online. The libraries which used podcast kept the content short for duration of 3- 6 minutes. The libraries should make use of these tools; they can podcast/vodcast some of their important programmes as it is impossible to schedule a programme at a time when everyone who is interested can attend. These tools offer users a chance to listen or view to the files whenever or wherever they want to.

For example, the library of University of Leicester provides vodcasts on self issue and return procedure; Mount Allison University Library Provides pod casts on search strategy, plagiarism and so forth. The Library should provide RSS feeds to the podcast/vodcasts developed by them. Social networking sites were used by 14.23% of the libraries. Their use is still not commonplace among the libraries. The use of these tools is increasing among the students these days. According to Wikipedia, social networking sites like Face book, Myspace, Orkut have 235,000,000; 253,145,404; and 67,000,000 registered users respectively.

The library professionals should tap the potential of these tools. The libraries should set up accounts with the social networking sites. These can be used by the libraries for publicizing the collection and services to attract more users.

Use of RSS

TableNo.4 Objectives of using RSS

| S. No. | Objective of using RSS | %of libraries |
|--------|---|---------------|
| 1. | General News and University News | 36.98 |
| 2. | Library News and events | 35.55 |
| 3. | List of new books | 26.07 |
| 4. | List of e- journals, new databases | 20.38 |
| 5. | Announcements about workshops and exhibitions | 17.06 |
| 6. | Rss for addition to IR | 3.32 |
| 7. | Help for Catalog search | 1.42 |
| 8. | Library instructions | 7.11 |

The Table No.4 shows that 36.98% of the libraries used RSS for providing General News/University news;35.55%of them used RSS for Library news and events;26.07% used RSS for providing information about new books;20.38% for new e- journals;17.06% used it for announcements about workshops and exhibitions;3.32% of libraries used RSS for providing information about additions to Institutional Repository (IR);1.42% used for explaining how to use a catalogue and 7.11% used RSS for providing library instructions.

For instance, the Concordia University library provides RSS feeds of the latest material acquired by the University Library. The feeds are listed subject wise in an alphabetical order. Thomson Rivers University Library lists RSS feeds provided by online databases subscribed by the Library-EBSCO RSS Feeds, PROQUEST RSS Feeds and so forth. The Library of University of Lincoln and Loughborough University Library provided RSS feeds for General news/University news, library news and announcements .These libraries provided the feeds for latest additions to their institutional repositories.

Features of RSS

Table No.5 Features of RSS

| S. No. | Features of RSS | %of libraries |
|--------|---------------------------------|---------------|
| 1 | Instructions given to use RSS | 25.60 |
| 2 | Links available to download RSS | 26.07 |
| 3 | News is under categories | 31.76 |
| 4 | Items are searchable | 24.17 |

It is evident from the Table no.5 that 25.60%of the libraries had given instructions about how to use RSS; 26.07% had provided links to download RSS; 37.76% had items under categories; and in 24.17% of the cases, items were searchable. For example, University of Derby ,University of Dundee, University of Liverpool- their libraries have explained the concept of RSS and given help instructions about how to download RSS readers and subscribe to feeds.

Accessibility of blogs

Table No. 6 Accessibility of blogs

| S. No. | Accessibility | %of libraries |
|--------|-----------------------------------|---------------|
| 1 | Blog accessible to all by default | 44.08 |
| 2 | Blog accessible by log in | 1.4 |

The data reveals that 44.08%of the libraries had blogs which were accessible to all by default and 1.4% of the libraries' blogs required the students to log in. For example the library of University

College Plymouth, St Mark and St.John had a blog which was not accessible to all by default; one had to login through Learning Space homepage.

Use of blogs

Table No. 7 Use of blogs

| S. No. | Objective of using blogs | %of libraries |
|--------|---------------------------------------|---------------|
| 1 | General Information | 28.44 |
| 2 | Research tips | 20.38 |
| 3 | New books | 19.91 |
| 4 | Book reviews | 15.17 |
| 5 | Information literacy | 8.53 |
| 6 | New databases | 39.34 |
| 7 | Downtime of servers/databases | 33.18 |
| 8 | Hours of operation/holidays | 31.28 |
| 9 | Information about employment &careers | 7.6 |

The Table no.7 reflects that 28.44% of the libraries used blogs for providing general library information;20.38% imparted research tips through them;19.91%of the libraries used blogs to inform about new books included in the collection;17.17% provided book reviews of popular titles; a majority of them-39.34%used blogs to list the new databases subscribed by them ;33.28%of the libraries used blogs to inform the users about downtime of servers and databases;;31.28%of the libraries announced hours of operations and holidays through blogs;and a miniscule-7.65% disseminated information about employment and careers . The Bath University Library has numerous blogs; the Library through blogs disseminates –information for faculty members from different disciplines; like news about library resources /services for Health/sports subjects ;news about library development for Faculty of engineering subjects.

The Brescia University Library blog provides information about new books, databases; book reviews etc The Graceland University Library blog imparts research tips and information about downtime of servers and databases. The university of Bolton Library blog offers advice on a wide range of student support issues-employment and career, personal well being and mental health.

Features of blogs

Table No. 8: Features of blogs

| S. No. | Features of blogs | % of libraries |
|--------|--|----------------|
| 1 | Instructions given how to use blogs | 21.33 |
| 2 | Dates and times of postings | 40.76 |
| 3 | Archives for the blogs | 39.81 |
| 4 | Latest postings are within the last week | 26.66 |
| 5 | Entries are brows able by topics | 38.86 |
| 6 | Archive entries are up to 1 year | 32.70 |
| 7 | Blog links to Library's home page | 33.65 |
| 8 | Blog links to Library catalogue | 23.22 |

It is evident from Table no 8 that 21.33% of libraries had given instructions regarding how to use blogs; 40.76% of them had dates and times of the postings;39.81% of libraries' blogs had archives ;for 26.66%of libraries' blogs had latest postings in the last week;38.86% libraries' blogs ' entries were brows able by topics;32.70%of the libraries had blog archives. The significant number of libraries had blog archives which were less than a year old. This implies that the libraries had recently started using blogs. Whereas some libraries - for example the libraries of the following universities-Clark university, Cornell University, Morehead state university had blog archives from 2007; 33.65% of the libraries had blog links to (library's) homepage and 23.22%had links for Library catalogue.

The Falvey Memorial Library of Villanova University had a blog where entries were arranged under different categories and were browsable too. . The same blog provided link to library's home page and catalog.

Use of Podcast

Table No. 9: Use of Podcast

| S. No | Use of Podcast | % of libraries |
|-------|--|----------------|
| 1 | Library orientation tours | 3.8 |
| 2 | General Searching skills | 4.2 |
| 3 | Searching Library Catalogues | 3.7 |
| 4 | Guidance with resources | 4.2 |
| 5 | Guidance with library facilities | 3.8 |
| 6 | Information literacy tutorials | 0.4 |
| 7 | Interviews /speeches of important personalities/Presidents | 2.8 |

The word pod casts comes from the amalgamation of word "ipod and broadcast". It is an audio program distributed over the internet. The standard way of receiving pod casts is by subscribing or using a podcatcher, client such as itunes, juice. Subscription may be done through directories or by entering a pod cast's RSS feed URL on to the client.

The TableNo.9 highlights that the top 34 purposes of using podcast were , "General searching skills", "Guidance with resources", "Library orientation tours", " Searching Library catalogues". The Utah Valley University Library publishes Libcast-a podcast that highlights library events services and resources .

The Library of University of Derby provides pod casts for the lectures delivered by leading public figures. The podcasts are very useful web2.0 tools; these do not require students to read numerous pages, which is very monotonous at times; instead they may listen to podcast and follow step by step instructions. These may prove very beneficial for the students who are visually challenged.

Features of Podcast

Table No. 10: Features of Podcast

| S. No | Features of Podcast | % of libraries |
|-------|---|----------------|
| 1 | Instructions given on how to use pod cast | 9.00 |
| 2 | RSS feeds available for Pod casts | 6.64 |
| 3 | Transcripts available for pod casts | 5.69 |

The Table no.10 reflects that 9% of the libraries had given instructions on how to use podcast; 6.64% of the libraries had provided RSS feeds for the pod casts and 5.69 %offered transcripts for the pod casts. The Southern Wesleyan University library provided pod casts of speakers from chapels and various other events. The instructions were given how to download pod casts using iTunes feeds. The Library of University of South Dakota also provided RSS feeds for pod casts. The Library of University of Aberdeen publishes 4 pod casts a year which coincide with important times in the University Calendar .The Library has clearly given instructions how to subscribe to the pod casts through the iTunes. The Ball State University Library has very elaborately explained about pod casting. The RMIT University Library has offered transcripts for all the podcast episodes.

Use of Vodcasts

Table No.11 Use of Vodcasts

| S. No | Use of Vodcasts | % of libraries |
|-------|--|----------------|
| 1 | Guidance with e-resources,databases,e-books | 1.9 |
| 2 | Accessing catalogue | 1.9 |
| 3 | Accessing electronic resources from off campus | 1.0 |
| 4 | Self issue and return | 1.4 |

A vodcast is a term to describe the online delivery of video on demand via RSS attachments. Regarding the use of Vodcasts, 1.9% of the libraries used vodcasts for providing guidance with e-resources, databases, e- books;1.9%libraries provide vodcast on how to use library catalogue;1.0 %offered help on how to access resource from off campus;1.4% explained how to go for self issue and return . The library of University of Leicester provided vodcasts on self issue and return procedure; The Library of University of Aberdeen provided vodcasts on how to access electronic resources, find material using library search tools; on how to access e- resources from off campus.

Use of Instant Message (IM)

Instant messaging allows online communication between two or more people using typed text via computers in real time. The application of instant messaging in libraries and information centers to provide a virtual reference service increases the availability of services to clients provides an additional method of communication to clients and brings the library to the community. The reference staff should be well versed with the basics of IM.

Table No.12 Use of IM

| S. No | Use of Instant Message | % of libraries |
|-------|--|----------------|
| 1 | Reference service | 62.09 |
| 2 | Advice on Library Services | 55.45 |
| 3 | Guidance with resources | 50.24 |
| 4 | others | 12.32 |
| 5 | Adequate instructions on how to use IM | 40.29 |
| 6 | Library Offers text based chat | 49.29 |
| 7 | Library offers voice chat | 17.54 |
| 8 | Instant messaging services are available for more than 8 hours | 31.28 |

This tool of instant messaging was used by 62.09% of the libraries for offering reference service;55.45% offered advice on library services;50.24% explained how to use resources; 12.32% used IM for other purposes-like providing information about interlibrary loan, photocopying facilities and so forth;40.29%of the libraries offered adequate instructions on how to use IM ;49.29%of libraries offered text based chat ;17.54 % of libraries offered voice chat; 31.285 %of libraries offered IM for more than 8 hours.

The libraries offered IM through 'meebo' or the readers could use AIM, MSN ,yahoo for asking queries. The Library of University of Colorado clearly stated what kind of questions could be asked via IM. If chat was unavailable, there was provision for sending queries through e- mail .Princeton University Library had clearly mentioned the timings for instant messaging. By and large the chat service was available for fixed hours, but in certain libraries this service was available 24/7-in such cases the libraries were functioning in a consortium or providing collaborative reference services; so staff from some or the other library was always online to attend to the queries.

Results and Discussions

The mean of Web 2.0 application indexes has been calculated in the following manner:

Mean application Index= $\frac{\text{Total of indexes}}{\text{Total number of universities}}$

The study covered 277 universities' libraries. It was found out that out of 277 universities' libraries, 211 or 76.17% had adopted some or the other web2.0 tools whereas 66 of them or 23.83% did not use any web2.0 tools. Out of 211 universities which had embraced some kind of web 2.0 tools, 135 or 63.98% had Application Index above the mean of 14.22 whereas 76 libraries or 36.02 % had Application Index below the mean of 14.22 .Out of 135 libraries which had Application Index greater than the Mean Application Index,26 or19.25% were from Canada;5 libraries or 3.72 % were from Australia;29 libraries or 21.48 were from UK; and 75 libraries or 55.55% were from USA. The Table no1 shows first 20 countries out of 135 which have application index greater than the mean of 14.22.

Table no 2. Rank of first 20 libraries Libraries

| S.No | Rank | University Library | Country | AI |
|------|------|--|---------------|----------------|
| 1. | 1. | Memorial University of New Founland | Canada | 51.94 |
| 2. | 2. | <ul style="list-style-type: none"> • Dalhousie University • Regis University | Canada USA | 38.96 38.96 |
| 3. | 3. | Gonzaga University | USA | 37.66 |
| 4. | 4. | Sacred Heart | USA | 36.36 |
| 5. | 5. | Thomas Jefferson University | USA | 36.36 |
| 6. | 6. | Lakehead University | Canada | 36.36 |
| 7. | 7. | University of East london | UK | 35.06 |
| 8. | 8. | Ryerson University | Canada | 35.06 |
| 9. | 9. | Colorado state University | USA | 35.06 |
| 10. | 10. | Ball state University | USA | 35.06 |
| 11. | 11. | University of sunderland | UK | 32.46 |
| 12. | 12. | University of Victoria | Canada | 32.46 |
| 13. | 13. | Brock University | Canada | 32.46 |
| 14. | 14. | Golden gate | USA | 32.46 |
| 15. | 15. | Yale University | USA | 32.46 |
| 16. | 16. | Duke University | USA | 32.46 |
| 17. | 17. | Princeton University | USA | 32.46 |
| 18. | 18. | University of Teesside | UK | 31.16 |
| 19. | 19. | Fairfield University | USA | 31.16 |
| 20. | 20. | University of Iowa | USA | 31.16 |

The libraries which had Application Index greater than the mean had adopted 2 or more web 2.0 tools whereas the ones which had Application Index less than Mean had adopted just one Web2.0 tool.

Use of Web2.0 tools in academic libraries in India

There are more than 300 UGC (University Grants Commission, India) recognized universities in the country. Their libraries are in the primary to advance level of automation. The libraries are still to start the use of Web 2.0 tools; but these are actively using Web1.0 tools, it is expected ,observing the rate of adoption of new technologies, that very soon these will embrace Web 2.0 tools to improve and enhance the services towards the users.

Good practices for integrating Web 2.0 tools in library services

1. The web 2.0 tools like blogs, RSS, social networking sites wikis should be actively used by the libraries.
2. Libraries may use pod casts as training tools for databases and online library resources.
3. The libraries should create blogs in various subject areas. They should create blogs for announcing new developments and events taking place in the university. The blogs should be accessible to all but comment may be added by authentic students only .The libraries may publish guidelines for using blogs. The students may be asked to follow IPR with regard to content added by others. The students should be told not to post any confidential information.
4. Pod casts may be used for informing user community about what is going on in the Library. Library tours may be provided on pod casts.
5. Libraries may use vodcasts to illustrate what the library has done and to attract community for future programmes. The libraries should prepare vodcasts on how to access library resources

from off campus; how to plan a search strategy and how to search articles in the online resources subscribed by the Library. In this context, the example of University of Aberdeen Library is worth mentioning.

6. The Library should run short term course on web 2.0 tools for the students and the faculty members.. The Chartered institute of Library and informational Professionals (CILIP) runs 2 courses like Web 2.0 nuts and bolts and Web 2.0 : building on the basics. The students and faculty members should be taught to incorporate these tools in their studies and programmes.
7. The libraries and information centers should create flyers and bookmarks with brief information about the blogs, RSS, wikis used in the library and distribute them during orientation classes and informal visits to the various departments.
8. The libraries may create a wiki where users may be allowed to create content on various educational aspects The wikis should be used by the Libraries for creating an online collaborative community in which the students, staff, teachers may interact with one another. These (wikis) may help the library staff in keeping constant track of the users' feedback. Henderson state University Library <http://huiewiki.hsu.edu/> has created wiki where there are 'Student Discussion' and 'staff' pages .The students can add content and the pages are searchable. The wikis may be developed as subject guides. The Library staff may list subscribed databases and online free resources in a particular subject area. The wikis may offer guidance and explain the general search tips -how to use Boolean operators, wild card, and truncation; how to search articles from the subscribed databases and so forth. The Air University Library <http://momoswiki.pbwiki.com/Alexander%20the%20Great> has used wikis to provide course support for research seminars. It has created 'Alexander the Great'wiki. The wiki lists the important websites and books from the Library collection which provide information about Alexander.

Scope for further research

- The use of Web 2.0 tools in open universities and how these have enhanced library services needs to be studied.
- Further studies need to be undertaken regarding users' feedback on these web2.0 .tools- whether they feel more drawn towards the libraries because of the application of these tools or otherwise.

Conclusion

The web 2.0 tools should be used to enhance library services towards the users. It is imperative to evaluate the web 2.0 tools, decide which is best suited to a particular type of environment and then apply it. Farkas(2007) has said web 2.0 tools should be used in a productive manner for providing access to resources, interactive reference services and information literacy sessions. There must be content and purpose and technology should not take precedence over the pedagogy.

The judicious use of these tools in the libraries can really lead to their transformation in to active knowledge hubs. The Library professionals must use new web 2.0 tools to offer traditional services in an innovative manner and address the information requirements of the tech fluent users. This will definitely help in eliminating library ennui, which is all pervasive among the user community and needs to be eliminated.

References:

- Birdsell,W.F.(2007), "Web2.0 as a social movement", *Webology*, Available at: www.webology.ir/2007/v4n2/a40.html
- Bradley.(2007) How to use Web2.0in your Library,Facet,London.
- Chawner ,B.and Lewis ,P.H.(2006) "Wiki Webs:new ways to communicate in a web environment", *Information Technology and Libraries*,Vol25(1),pp33-43
- Chu , Melanie and Meulemans, Yvonne Nalani (2008) , "The Problems and Potential of MySpace and Facebook usage in academic libraries", *Internet Reference Services Quarterly*,Vol13(1)pp:69-85
- Clyde,L.A.(2004),"Library Web logs", *Library Management*,Vol25(4-5),pp183-90
- Cohen,Sarah Faye (2008),"Taking 2.0 to the Faculty: Why, Who ,and How", *College and Research Libraries News*,Vol69(8),pp472-475
- Downes, S.(2005), "e-learning 2.0",e learn Magazine: Education and Technology in perspective, available at www.elearning.org/subpage.cfm?section=articles&article=29-1

- Farkas,M.(2007),*Social Software in Libraries :Building Collaboration, Communication and Community Online*, Information Today Inc.,Newark,NJ
- Franklin, T and Van Harmelen,M(2007), “Web2.0 for content for Learning and Teaching in Higher Education,JISC,Bristol”, Available at: www.jisc.ac.uk/media/documents/programmes/digital_repositories/web2-content-learning-and-teaching.pdf
- Frumkin,J.(2005) “The wiki and the Digital Library”, *OCLC Systems and Services*,Vol21(1),pp18-24
- Huffman,K.(2006), “Web2.0:beyond the concept practical ways to implement RSS,podcasts and wikis,” *Education Libraries* ,Vol29(1),pp12-19
- Kajewski, MaryAnn (2007), “emerging technologies changing our service delivery models”, *The Electronic Library*, vol 25(4), pp420-429
- King,D.L. and Porter,M.(2007), “Collaborating with wikis”, *Public Libraries*,Vol46(2),pp32-35
- Linh, Nguyen Cuong (2008), “A survey of the Application of Web2.0 in Australasian University libraries”, *Library Hi Tech*, Vol26 (4),pp630-653
- Macaskill, W. and Owen, D (2006) , “Web2.0 to go” ,Proceedings LIANZ Conference 2006,Wellington
- Maness,J(2006), “Library2.0theory:web2.0 an its implications for libraries”, *Webology*, Vol3(2) .Available at:www.webology.ir/2006/v3n2/a25.html
- Miller ,P.(2005) “ Web2.0:Building the new Library” ,*Ariadne*,No.45, Available at www.ariadne.ac.uk/issue45/miller/intr.html
- Notess,G.R. (2006) , “ The terrible twos:web2.0,library2.0 andmore”, *Online*,Vol30(3),pp40-42
- Singer, M.A.and Sherrill,K (2007) “Social software,Web2.0,Library &You:A Practical Guide for Using Technology 2Your Library” ,*Indiana Libraries*,Vol26(3),pp48-52
- Stephens,M(2006) . “Exploring Web 2.0 and libraries”. *Library Technology Reports*, Vol42 (4), pp8-14
- Tedd, Lucy A.(2008) “Editorial” *Program* ,Vol42(3),pp213-214
- Virkus,Sirje (2008), “Use of web 2.0 technologies in LIS education :experiences at Tallinn University,Estonia,*Program* Vol42(3),pp262-274
- Weaver

Checkpoints used

Use of web 2.0

1. Does the Library use any type of web 2.0 technologies?
2. Does the Library use Rss?
3. Does the Library use blogs?
4. Does the Library use IM?
5. Does the Library use podcasts?
6. Does the Library use social networking sites?

Rss use

7. General news/University news
8. Library news and events
9. List of new books
10. List of e- journals, new databases
11. Announcements about workshops and exhibitions
12. Rss for additions to IR
13. Help for catalog search
14. Library instructions
15. Instructions given to use RSS
16. Links available to download RRSS
17. News is under categories
18. Items are searchable

Blog use

19. Blog accessible to all by default
20. Blog accessible by log in
21. General information
22. Research tips
23. New books

24. Book reviews/discussions
25. Information literacy
26. New databases
27. Down time of servers/databases
28. Hours of operation, holidays
29. Information about employment and careers
30. Instructions given how to use blogs
31. Dates and time of postings
32. Archives for the blog
33. The latest postings are within the last week
34. Entries are browsable by topics
35. archival entries are up to 1 year
36. Blog links to Library's homepage
37. Blog links to Library catalogue

Pod cast use

38. Library orientation tours
39. General searching skills
40. Searching Library catalogues
41. Guidance with resources
42. Guidance with Library facilities
43. Information literacy tutorials
44. Interviews/speeches of Presidents/important personalities
45. Instructions given on how to use podcasts
46. Rss feeds available for podcasts
47. Transcripts available for podcasts

Use of vodcasts

48. Guidance with e- resources-databases and e- books
49. Accessing catalogue
50. Accessing electronic resources from off campus
51. self issue and return

Use of IM

52. Reference services
53. Advice on Library services
54. guidance with resources
55. others
56. Adequate instructions on how to use IM
57. Library offers text based chat
58. Library offers voice chat
59. Instant messaging services are available for more than 8 hours

Use of wikis

60. As subject guides
61. Project planning
62. Policy manuals
63. Resource listings
64. Training resources
65. Others
66. Instructions given on how to use wikis
67. Library designs its own wiki
68. Allows users to edit an existing page
69. Provide tools to format text and images
70. Enable users to upload files
71. The users can recall, reedit and restore a previous page
72. Provide Rss feeds for new and updated information
73. Provide keyword search engine
74. Link to Library home page
75. Requires users to register

76. Have statement about copyright and content ownership
77 Is social book marking available?