The study of use of Web 2.0 tools in LIS education in India

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Abstract:

Purpose: The present study investigates LIS teacher's familiarity with web 2.0 concepts, tools and services and applications related to LIS education.

Methodology: The survey method was used. The data collection tool was a web questionnaire, which was created with the help of software provided by surveymonkey.com.

Findings: It was found that LIS teachers have a low level of familiarity regarding the use of web 2.0. Most of the teachers use web 2.0 for videosharing via Youtube. Nearly half of teachers never used Wikis. The main problem in use of web 2.0 in teaching was the lack of training programmes organized by universities and other institutions for teachers to use/teach web 2.0 tools.

Limitations: The state government funded universities of Maharashtra state of India were considered for the study.

Originality: This is one first study focusing on the use of web 2.0 tools in teaching by the LIS teachers in India.

Keywords: Web 2.0, LIS education, India

Paper type: Research paper

Introduction

Web 2.0 refers to a perceived second generation of web-based applications and services and in particular the use of the web as a platform for user-generated content and web-based communities, including particularly social networking, wikis and folksonomies (O'Reilly, 2005).

There is no doubt that the Web 2.0 changed and transformed access to information and communication. It provides user-created content platform applications allowing users to contribute their knowledge in different formats like text, data, video and audio. This term was

also developed and associated with other terms like Library 2.0, Learning 2.0, etc. These terms reflect the implementation of Web 2.0 in different domains. Garcia *et al*. (2009) noted that Web 2.0 has the potential for universities in developing new models of interaction and new forms of exciting education.

The Web 2.0 applications hold profound potentials in education because of their open nature, ease of use and support for effective collaboration and communication. They change the traditional view of human knowledge and open up more opportunities in teaching and learning. Today, many teachers are exploring the use of Web 2.0 tools into teaching and learning. However, many researchers agree that studies of teachers' perceptions and opinions are critical because teachers' perceptions are significant to the implementation of technology innovations in teaching and learning. The present study aimed to explore teachers' use and perceptions of Web 2.0 technologies in teaching and learning. It was expected that the findings of this study would provide useful information that enables administrators and teacher educators to better understand teachers' use and perceptions of Web 2.0 technologies in teaching and learning. Consequently, a well focused course or training program for pre and in-service teachers integrating Web 2.0 technologies in education could be design, developed, and implemented.

The present paper investigates LIS teacher's familiarity with web 2.0 concepts, tools and services and applications related to LIS education. It also explored the limitation of use of web 2.0 by the teacher's community in India.

Review of literature

There were several articles published describing what is web 2.0 and its applications in education and in libraries. On a contrarily there were very few article which discussed the use of web 2.0 in LIS education in teaching and learning. The important article in this regard was by Virkus (2008). In his paper he described the experiences of the Institute of Information Studies of Tallinn University in introducing ICT, including Web 2.0 technologies, in library and information science education. The study found out that the staff has been experimenting with Web 2.0 technologies and a few have successfully adopted them in teaching and learning.

A paper by Bawden *et al.* (2007) reported an international comparison of changes in library/information curricula, in response to the changing information environment. It described in detail the responses to an increasing proportion of e-content and the impact of the communication and social networking features of Web 2.0, and Library 2.0. It examined both changes in curriculum content, and in methods of teaching and learning.

Foo and Ng (2008) examined how library schools have addressed web 2.0 and library 2.0 as an important aspect of education. It was found that little have done so far by library schools, particularly in U.S., to embrace Library 2.0 education. They have also proposed a framework for Web 2.0 plan for education.

Al Daihani (2009) explored the attitude of Library and Information Science (LIS) academics towards Web 2.0. He investigated academician's familiarity with Web 2.0 concepts, tools and services and applications as these relate to LIS education, and the barriers to their use.

Objectives:

The objectives of the present study were as follow:

- to determine which elements of web 2.0 are included in the syllabus of the LIS school in India
- to know degree of knowledge and usage of web 2.0 tools by LIS teachers
- to find out which web 2.0 tools are taught to students
- to know what are the teachers expectations about web 2.0 tools from students
- to find out the problems in using/teaching web 2.0
- to know whether there is any plan to have full course on web 2.0 in future or not

Population of the study

The teachers of selected Library and Information Science (LIS) schools of Maharashtra state of India were considered as a population of the study. Researcher found out list of universities of Maharashtra where LIS courses are offered. With the help of university websites LIS teachers were identified. Teachers in this study includes full-time, part-time and visiting faculty engaged

in actual teaching theory and practicals of BLISc and MLISc degree course. There are 40 universities in Maharashtra state of India. Out of 40 universities, nine universities offer LIS degree courses. In these nine universities approximately 30 teachers are on pay roll including full time, part time and visiting faculty.

Research Methodology

The data collection tool applied for the study was web questionnaire, which was created with the help of software provided by surveymonkey.com. This questionnaire was made available online to 30 teachers for filling in data. The web link to the questionnaire was sent to teachers on through e mail. There were 17 teachers responded to the questionnaire making a total response rate of 57%.

A questionnaire consisting of three sections was designed using the SurveyMonkey online survey tool. The first section had two questions about faculty members in general. The second section consisted of eight questions inquired about their purpose and use of Web 2.0. It asked usefulness of web 2.0 in teaching and its barriers in teaching. In the third section academicians were asked about their syllabus component of web 2.0 and their future plans regarding web 2.0 course.

Findings:

The first section asked respondents about their designation, affiliation to the university, number of years of teaching experience, and their age. It was found that out of 17 teachers, 2 were heads of LIS schools/departments, 2 associate professors, 10 assistant professors and 3 visiting faculty. More than half of the respondents were between 31-40 age group.

The second sections asked respondents about introduction of ICT in education, use and usefulness of Web 2.0, problems in teaching Web 2.0, and future plans.

Benefits of introducing ICT in education

It was observed that 94.1% respondents agreed that ICT offers new and innovative modes of learning. This was followed by 'Offers teacher's opportunities to spend more time on the creation of lessons in a new and challenging way' (82.4%). The data is presented in table no. 1.

Table no. 1: Benefits of introducing ICT in education

	Response Percent	Response Count
Helps to simplify/reduce routine and repetitive tasks	70.6%	12
Offers new and innovative modes of learning (multiple modes of interaction – a)synchronous, differentiated content, interactive learning materials)	94.1%	16
Offers flexibility of time, place, pace	64.7 %	11
Offers teachers opportunities to spend more time on the creation of lessons in a new and challenging way	82.4%	14
Others (please specify)	17. 7%	3
	answered question	17
	skipped question	0

There were 17.7% respondents mentioned in others that it helps students in logical thinking and better understanding of concept.

Do you use any of the following Web 2.0 tools?

It was observed that 58.8% respondents use Videosharing e.g. Youtube for fun or social purpose. For teaching, it was found that 41.2% respondents uses Social Networking sites e.g., Orkut/Facebook. The data is given in table no. 2.

Table no. 2: Use of Web 2.0 tools

	Never heard of it	Never used it	Socially/For fun	For teaching	Response Count

Social Bookmarking e.g., SumbleUpon	18.8% (3)	31.3% (5)	12.5% (2)	37.5% (6)	16
Calandering e.g., Google Calender	0.0% (0)	20.0% (3)	46.7% (7)	33.3% (5)	15
Collaborative authoring e.g., Creating Wikis	6.3% (1)	50.0% (8)	18.8% (3)	25.0% (4)	16
Videosharing e.g., Youtube	0.0% (0)	5.9% (1)	58.8% (10)	35.3% (6)	17
Social Networking e.g., Orkut/Facebook	0.0% (0)	5.9% (1)	52.9% (9)	41.2% (7)	17
File sharing e.g., using Napster	6.7% (1)	33.3% (5)	26.7% (4)	33.3% (5)	15
Communication tools e.g., Skype/gtalk/RSS	0.0% (0)	17.6% (3)	47.1% (8)	35.3% (6)	17
	answered question				17
	skipped question				0

What purpose do you use Web 2.0 in practice?

It was found that almost all i.e. 82.4% use web 2.0 for Sharing of photographs/videos. Equal number of respondents i.e. 58.8% uses web 2.0 for sharing presentation on slideshare and for Creating blog/contributing to blog. The data is presented in table no. 1.

Table no. 3: Purpose of use of Web 2.0 in practice

	Response	**Response**

	Percent	Count
Bookmarking web pages and sharing with your students	52.9%	9
Online writing/editing/publishing using Wikipedia	23.5%	4
Sharing of photographs/videos	82.4%	14
Sharing your presentation on slideshare	58.8%	10
Creating blog/contributing to blog	58.8%	10
Never used it	11.8%	2
	answered question	17
	skipped question	0

What is the usefulness of teaching Web 2.0 tools?

Almost all respondents felt that it equips learners and teachers with versatile tools of knowledge exchange and collaboration, which overcome the limitations of face to face instruction. This was followed by 88.2% respondents who opined that it increases self directed learning skills and enables teachers to better develop ad realize their personal potential

Table no. 4: Usefulness of teaching Web 2.0 tools

	Response Percent	Response Count
It has more student-centered teaching and learning	70.6%	12
Instead of memorizing, students gain more freedom for creativity	47.1%	8
The teachers will design the framework in which the students can adapt the courses according to their needs	64.7%	11

A lot of content can be created during projects especially at university	70.6%	12
It increases self directed learning skills and enables teachers to better develop ad realize their personal potential	88.2%	15
It equips learners and teachers with versatile tools of knowledge exchange and collaboration, which overcome the limitations of face to face instruction	94.1%	16
P2p learning, students learn from peers	64.7%	11
	answered question	17
	skipped question	0

What are the problems in teaching Web 2.0?

The equal number of respondents i.e. 64.7% felt that Lack of infrastructure and Lack of maintenance of Computers & Security issues were the main problems in teaching Web 2.0. In addition to this Lack of training programmes for teachers to use/teach Web 2.0 tools found to be the main problem (64.7%).

Table no. 5: Problems in teaching Web 2.0

	Response Percent	Response Count
Lack of infrastructure	64.7%	11
Lack of maintenance of Computers & Security issues	64.7%	11
Poor Internet access	41.2%	7
No Internet access due to filters or internet firewalls	5.9%	1
Student's limitations with ICT skills	58.8%	10

Lack of content in local language	29.4%	5
Lack of time to explore all Web 2.0 applications	29.4%	5
Lack of training programmes for teachers to use/teach Web 2.0 tools.	64.7%	11
Not able to relate Web 2.0 applications with teaching	17.6%	3
Already overloaded with core library science teaching so no time to add on web 2.0 tools	17.6%	3
Have little or no interest in using integrated social software while teaching	0.0%	0
Web 2.0 is a very recent phenomenon that underlies continuous change and transformation	5.9%	1
Problems of preserving content produced through Web 2.0 services and applications	5.9%	1
Problems of identity, trust, reputation and privacy	11.8%	2
	answered question	17
	skipped question	0

Do you have any component of Web 2.0 mentioned in your syllabus of the paper you teach (T&P)?

More than half of teachers mentioned that they have component of Web 2.0 mentioned in syllabus of the paper they teach (T&P). There were 17.6 % respondents mentioned that at present no Web 2.0 component in their syllabus but would like to integrate it in the future.

Table no. 6: Any component of Web 2.0 in syllabus

	Response Percent	Response Count
Yes	52.9%	9
No	11.8%	2

No but would like to integrate it in the syllabus in future	17.6%	3
Not exactly mentioned in the syllabus but demonstrate in practicals	17.6%	3
	answered question	17
	skipped question	0

Do you have any plan in future to have a full or part time course on Web 2.0?

When it was asked about future planning it was found that 41.2% respondents would like to have full or part time course on Web 2.0.

Table no. 7: Future plan to have a full or part time course on Web 2.0

	Response Percent	Response Count
Yes	41.2%	7
No	29.4%	5
Planning Phase	5.9%	1
I Don't Know	23.5%	4
	answered question	17
	skipped question	0

Do you think that knowledge/use of Web 2.0 will help students to become more competent in the Library 2.0 era?

All respondents are confident that knowledge/use of Web 2.0 will help students to become more competent in the Library 2.0 era

Table no. 8: Knowledge/use of Web 2.0 will help students to become more competent in the Library 2.0 era

	Response Percent	Response Count
Yes	100%	17
No	0.0%	0

Conclusion & Discussion

This research has provided insight into the perception of web 2.0 by academics of nine LIS schools in Maharashtra state of India. Most of these schools have a good ICT infrastructure and Internet connections. The effective use of web 2.0 applications is dependent on academics' familiarity and interaction with these tools, the opportunities they have had for exposure to the applications and their level of skills. This study shows that these academics have a low level of awareness of the web 2.0. Most of the teachers use web 2.0 for videosharing via Youtube. Nearly half of teachers never used Wikis.

The main problem in use of web 2.0 to teach students was lack of training programmes for teachers to use/teach web 2.0 tools. According to norms of University Grant Commission (UGC), in India refresher courses in the respective subject is compulsory for every teacher to attend. These refresher courses are organized by academic staff colleges of universities or the departments of universities. The directors of such colleges and department should include the web 2.0 component in their course so that teacher will be equipped with the teaching/learning of web 2.0. The best part to learn is to read documentation available on the sites of web 2.0 tools, blogs, forums and little practice may be the good start to learn.

More than half of teachers mentioned that they have the component of web 2.0 mentioned in syllabus of the paper they teach (T&P). All teachers thought that knowledge/use of web 2.0 will help students to become more competent in the Library 2.0 era

The web 2.0 affects the creation, distribution, dissemination and repackaging of information and the sharing of knowledge. Virkus (2008) suggested that LIS educators should take advantage of this new technology in order to make progress in this new context. Since the inception of web 2.0, however, it has posed social and academic challenges for LIS schools and educators as the information market is demanding new competencies and skills from LIS graduates. Libraries also expect professionals on their workforce to be equipped with appropriate competencies in

web 2.0. This suggested that student in LIS programmes need to have a fresh orientation directed toward developing web 2.0 competencies and LIS educators need to introduce changes in the content and substance of their curricula.

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