Readers 2.0. What kind of library do they need?

Marta Wontorowska
Department of Information Science and Bibliology
Nicolaus Copernicus University
Gagarina 13A, 87-100 Toruń, Poland
tel./fax: +48 (56) 611-4415
marchewaw@wp.pl

ABSTRACT
Nowadays we often encounter names of many different disciplines containing 2.0, such as Culture 2.0, Science 2.0, Law 2.0 and Library 2.0, what means that they realize principles of Web 2.0. This paper aims to show what elements of this new trend create Library 2.0 and how does this institution fulfil the needs of readers in the information age. Moreover, a research conducted among students of Nicolaus Copernicus University showed which components of Second Generation Library are truly required by users, and which of them constitute empty buzzwords with no meaning. Conclusions of this paper can be used in (re)building library web page or in creating Library 2.0 community.

KEYWORDS: Web 2.0, Library 2.0, website usability, library web page, users’ needs, survey

1. INTRODUCTION
There are many publications about Web 2.0 and Library 2.0, that mostly discusses the meaning and the emergence of these terms, but still there has been little theoretical work and there is a need to develop more formal definitions and frameworks. Tim O’Reilly, the creator of the name Web 2.0 has its own blog dedicated to the Second Generation Internet. We can find articles concerning this new trend in journals, magazines, databases, subject gateways such as Journal of Librarianship and Information Science, E-LIS archive, INTUTE and many others. There are a lot of examples of implementations the Web 2.0 principles both into libraries’ webpages, but also into libraries’ organizations. Some of them were required and changed the image and usability of libraries for better. But many principles that prove true in web pages of commercial or entertainment institutions cannot be engaged in library web page, as it is still an organisation regarded as the guardian of knowledge. Hereunder some findings, created on a base of a survey conducted among students, are shown. They concern the usefulness of different Web 2.0 elements that can be implemented in libraries’ websites.

2. METHODS USED FOR THE STUDY
The research is based on a survey conducted among one hundred students of twenty nine different faculties from Nicolaus Copernicus University, who were asked to evaluate the usefulness of separate Web 2.0 elements on libraries’ web pages. They decided which of them are required and can be very useful, and which can be abandoned during creating or rebuilding a web page. Among the students, there were 59 women and 41 men, from the second year of study (47%) and fourth year of study (53%). The respondents seem to be acquainted with the Web 2.0 phenomenon, as 82% of them declare to take part in social networks, 43% assures that they participate
in creating forum, 19% in creating or modifying articles in wikipedias and 11% have their blogs. The questionnaire contained 11 questions, concerning the frequency of using libraries and library web pages, sources of information usually used, general attitude towards Web 2.0 elements etc. Inquired students were also asked to decide which of mentioned elements, such as blogs, RSS channels, wikis, tags, forums etc. are essential, which can be useful and finally which are useless.

3. FINDINGS

The results of the survey shows, that Web 2.0 elements in library web pages are considered by students as more participative, friendly, comfortable and easy for users. Engaging elements such as RSS, blogs, wikis, users` bookmarks etc. and building the Library 2.0 community enables to change the image of library from the slow, unresponsive, unappealing and irrelevant institution, to the user-friendly, serviceable, communicative and participative organisation. Nevertheless, users notice the great difference in quality between user generated content (such as blogs, wikis etc.) and edited publications both in traditional (printed) and online (electronic) versions. They seem to be aware of some limitations in implementing new trends into such institutions as libraries. It has been observed by some users, that few Web 2.0 elements in a library web page may even disturb and cause some confusions.

The survey showed that half of the inquired students use library few times a month, 29 of them use it even more often, 19 students use it more seldom and two of them never. 81% of them search scientific books and 80% handbooks. Also books read for an amusement (40%) and scientific periodicals (31%) are popular among responders. Few of them utilize cartographic and graphic collections, old prints, databases and entertainment magazines.

Chart 1. Sources of information frequently used by students.

Chart 2. The frequency of using library website.

Most of students (87%) search their faculty libraries and 85% use University Library. Half of students use public libraries and only 13% make use of a digital library. Responders also declare to be very active with using the OPACs and libraries` web pages. Chart 2 presents their answers. 44% of them use it few times a month, and 26% even more often. 24% visit library services more seldom and 6% never.

Summarising the background and the type of inquired students we may assume that they constitute a group of
active library users and they usually look for different sources of information in few libraries. An average number of different types of library used per one person equals 2.42. Women seem to use diversified kinds of libraries – the number of libraries used per one person is 2.54, and among men it equals 2.24. Moreover females use both libraries and libraries’ web pages more often than men. Also students from the second year of study seem to be more active – they use library services and visit libraries more often than their colleagues from fourth year.

Furthermore respondents were asked to decide which of enumerated elements are necessary on a library web page and in what degree. They considered such internet tools as instant messengers (e.g. Skype, ICQ), contacting by an e-mail or a webform, streaming media, RSS channels, library users’ weblog, librarians’ weblog, users’ forum, wiki, tags, social networking, e-learning (information retrieval courses), suggesting the item for a library to buy, entertainment (e.g. educational games), adding the information about cultural events, users’ link collections to interesting and valuable websites and sections dedicated to children and youth (with educational games, exercises, articles, book reviews etc.).

**Chart 3. The usefulness of different Web 2.0 elements.**

The answers are showed in chart 3. Respondents considered the possibility of adding tags to book description by users (39%) and contacting with the librarians by an e-mail or a webform (32%) as indispensable elements, necessary on every library website (marked with the red colour on a graph above). 16% of students regarded wiki as an essential tool, 15% chose e-learning (especially information retrieval courses), 13% stressed the possibility of suggesting new items to buy and 12% of them pointed sections of a library website dedicated to children and youth (with educational games, exercises, articles, book reviews etc.) as the most required elements. Over half of students decided, that such tools as instant messengers, e-mails and web forms, streaming media, RSS channels, forums, wikis, tags, e-learning, suggesting new items, adding the information about cultural events, link collections and dedicated sections (marked with the yellow colour on the graph above) can be useful and are welcome on a website, but are less serviceable than the first group. Students also distinguished the third group of Web 2.0 elements, which they consider to be redundant and useless on a library website. In this group they pointed entertainment (64% of answers) users’ weblogs (62%), librarians’ weblogs (55%) and social networking (55%).
On the need of comparing the results of the survey and estimating the value of separate Web 2.0 elements, each group of answers received points. Answers considered as indispensable obtained 2 points, useful 1 point and useless -1 point. The final mark of a tool equals the number of points gathered from all of the answers concerning the tool.

**Example:**

4 students assessed the instant messenger (IM) as an indispensable tool (2 points for each answer), 60 students assessed the IM as an useful tool (1 point for each answer), and finally 36 students considered the IM as an useless tool (-1 point for an answer)

The final mark of an instant messenger is counted: 

\[(4 \times 2) + (60 \times 1) + [36 \times (-1)] = 32\]

Numbers written in black stand for amounts of answers and numbers written in red are total points (final mark of a tool).

**Table 1. The value of different internet tools.**

<table>
<thead>
<tr>
<th>Tool</th>
<th>indispensable</th>
<th>useful</th>
<th>useless</th>
<th>points</th>
</tr>
</thead>
<tbody>
<tr>
<td>instant messengers</td>
<td>4</td>
<td>60</td>
<td>36</td>
<td>32</td>
</tr>
<tr>
<td>e-mail</td>
<td>32</td>
<td>62</td>
<td>6</td>
<td>120</td>
</tr>
<tr>
<td>streaming media</td>
<td>10</td>
<td>66</td>
<td>24</td>
<td>62</td>
</tr>
<tr>
<td>RSS</td>
<td>7</td>
<td>60</td>
<td>33</td>
<td>41</td>
</tr>
<tr>
<td>users` weblogs</td>
<td>1</td>
<td>36</td>
<td>62</td>
<td>-24</td>
</tr>
<tr>
<td>librarians` weblog</td>
<td>9</td>
<td>36</td>
<td>55</td>
<td>-1</td>
</tr>
<tr>
<td>forums</td>
<td>5</td>
<td>77</td>
<td>18</td>
<td>69</td>
</tr>
<tr>
<td>wiki</td>
<td>16</td>
<td>71</td>
<td>13</td>
<td>90</td>
</tr>
<tr>
<td>tags</td>
<td>39</td>
<td>53</td>
<td>8</td>
<td>123</td>
</tr>
<tr>
<td>social networking</td>
<td>4</td>
<td>41</td>
<td>55</td>
<td>-6</td>
</tr>
<tr>
<td>e-learning</td>
<td>15</td>
<td>70</td>
<td>15</td>
<td>85</td>
</tr>
<tr>
<td>suggesting new items</td>
<td>13</td>
<td>62</td>
<td>25</td>
<td>63</td>
</tr>
<tr>
<td>entertainment</td>
<td>3</td>
<td>33</td>
<td>64</td>
<td>-25</td>
</tr>
<tr>
<td>adding news</td>
<td>7</td>
<td>78</td>
<td>15</td>
<td>77</td>
</tr>
<tr>
<td>link collection</td>
<td>8</td>
<td>83</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>dedicated sites</td>
<td>12</td>
<td>72</td>
<td>16</td>
<td>80</td>
</tr>
</tbody>
</table>

As it can be seen both in table 1 and chart 4, the most valuable, in the students` opinion, are tags, that can be added by users to a document description in OPAC (123 points), contacting with the library by an e-mail or web form (120 points), wikis and link collections (90 points), e-learning (85 points), dedicated sites (80 points) and the possibility of adding the information about cultural events on a library website (77 points). The least necessary or even disturbing is entertainment (-25 points) and users` weblogs. Also social networking (creating library community) and librarians` weblogs are considered to be useless.

**Chart 4. The final mark of different internet tools.**

Another task for students was to decide which sources of information available in the internet, enumerated in the question, are reliable and useful, and which of them not.

They could combine the answers, by choosing the options concerning the utility and reliability, as in the example:

*How do you assess the necessity and reliability of wikipedia?*

**Usefulness**

- **indispensable**
- **useful**
- **useless**

**Reliability**

- **reliable**
- **unreliable**
- **useless**

The results are shown in the chart 5. Most respondents (62%) regards libraries` OPACs as indispensable and reliable source of information. They also arranged to this group organizations` and institutions` web pages (35% of respondents), worldwide services (30%), online journals (27%), databases (26%), subject gateways (26%) and wikipedias (23%). Few of students regards forums and
private websites as essential and credible sources of information. In the group of useful and reliable sources we can find online journals (64%), databases (63%), subject gateways and organizations’ websites (62%), worldwide services (55%), OPACs (35%), forums (29%) and wikis (27%). The third main group contains useless and unreliable sources, such as weblogs (45% of answers), private websites (40%), forums (10%) and wikipedias (9%). There were also answers, that arranged some sources of information to the groups useless and reliable, useful and unreliable and indispensable and unreliable, which are confusing and difficult to assess. It is consoling that, among such a variety of different sources of information available in the Internet, libraries’ OPACs are considered to be valuable and credible.

Chart 5. The usefulness and reliability of different sources of information available in the Internet.

The last two questions in the survey concerned citing user generated contents, such as wikis, weblog, forums etc. and the attitude of teachers, tutors and lecturers towards such sources of information. It occurred that 49% of students employ user generated content in their work (e.g. essays, researches, thesis) but they do not admit it. Only 31% of students use such sources and refer to it. 20% declare not to utilize wikis, weblog, forums etc. 48% of respondents claim, that their teachers or lecturers called in question the reliability and solidity of online sources of information.

4. SUMMARY

This paper shows the importance of libraries’ flexibility and ability to change their images, services, attitudes toward users and ways of communicating with their environments. It stresses the necessity of selecting elements that create new library web page, to make it more interactive and participative, but to ensure its high quality. The results of the survey and users’ opinions about Library 2.0 are very useful and can be utilized in many projects and other researches. The survey reveals opinions of students, that is specific group of users: young, well – educated, usually working with computer
and open for changes. But this kind of survey should be conducted also among other groups of users and concerning different types of libraries, as the demands may be different. Moreover, findings of the research should be verified by usability testing of a library web page, created on the base of this survey. This would help to create functional and user-friendly web page enclosing Web 2.0 elements.

5. REFERENCES


DYSON, Esther. Wersja 2.0: przepis na życie w epoce cyfrowej, Warsaw 1999


6. ATTACHMENTS

QUESTIONNAIRE

The possibilities of using new Internet tools in libraries’ websites.

Year of study …………………
specialization ………………………………………
Sex F/M

1. How often do you use libraries?
   ◊ everyday
   ◊ few times a week
   ◊ few times a month
   ◊ once in few months
   ◊ once a year
   ◊ more seldom than once a year
   ◊ never

2. What kind of sources of information are you searching for in libraries? (few answers possible)
   ◊ scientific books
   ◊ handbooks, textbooks
   ◊ books read for an amusement
   ◊ scientific periodicals
   ◊ entertainment magazines
   ◊ databases
   ◊ cartographical collections
   ◊ graphical collections (albums, posters, reproductions)
   ◊ musical and audiovisual collections
   ◊ old prints
   ◊ social life documentation (leaflets, posters)
   ◊ other …………………………………………..

3. What libraries do you use? (few answers possible)
   ◊ University Library
   ◊ faculty library
   ◊ public library
   ◊ digital library
   ◊ other …………………………………………..
   ◊ none
4. **How often do you use libraries’ websites?**
   - ◊ everyday
   - ◊ few times a week
   - ◊ few times a month
   - ◊ once in few months
   - ◊ once a year
   - ◊ more seldom than once a year
   - ◊ never

5. **How do you assess the usefulness of these tools?**
   a) The possibility of contacting with the librarian by an instant messenger (e.g., **Skype**, **ICQ**) or chat
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   b) The possibility of contacting with the librarian by an e-mail or web form
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   c) Streaming media (**sound** and **pictures** that are transmitted on the Internet in a streaming or continuous fashion, using data packet, e.g., short films describing how to use the library)
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   d) **RSS channels** (feeds allowing the user to have new content delivered to a computer or mobile device as soon as it is published)
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   e) Library users’ weblog
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   f) Librarians’ weblog
      - ◊ indispensable
      - ◊ useful
      - ◊ useless
   g) Users’ forum
      - ◊ indispensable
h) wiki (mini-encyklopedia created by users or librarians)
   ◊ indispensable
   ◊ useful
   ◊ useless

i) tags (keywords or terms associated with a piece of information)
   ◊ indispensable
   ◊ useful
   ◊ useless

j) library users` community (social network such as MySpace, Flickr)
   ◊ indispensable
   ◊ useful
   ◊ useless

k) courses through the internet (e-learning), e.g. information retrieval course
   ◊ indispensable
   ◊ useful
   ◊ useless

l) the possibility of suggesting the item, that library should buy
   ◊ indispensable
   ◊ useful
   ◊ useless

m) entertainment (e.g educational games) on a library website
   ◊ indispensable
   ◊ useful
   ◊ useless

n) the possibility of adding the information about cultural events, such as exhibitions, meetings etc. in the appropriate section of library website
   ◊ indispensable
   ◊ useful
   ◊ useless

o) the possibility of creating link collections to interesting websites by users
   ◊ indispensable
   ◊ useful
   ◊ useless

p) sections dedicated to children and youth (with educational games, exercises, articles, book reviews etc.)
   ◊ indispensable
6. **Do you utilize user generated content, such as wikis, forum, weblog etc. while you are writing an essay or thesis? Do you refer to it (cite it)?**
   - I use it and I refer to it
   - I use it, but I never refer to it
   - I do not use it

7. **How do you assess the usefulness and reliability of these sources of information available in the Internet?**
   a) Libraries` catalogues (OPACs)
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable

   b) Institutions` and organizations` websites
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable

   c) Weblogs
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable

   d) Wikipedias
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable

   e) Forums
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable

   f) Worldwide/national services
      - **Usefulness**
        - indispensable
        - useful
        - useless
      - **Reliability**
        - reliable
        - unreliable
g) Subject gateways

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>◊ indispensable</td>
<td>◊ reliable</td>
</tr>
<tr>
<td>◊ useful</td>
<td>◊ unreliable</td>
</tr>
<tr>
<td>◊ useless</td>
<td></td>
</tr>
</tbody>
</table>

h) Private Web pages

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>◊ indispensable</td>
<td>◊ reliable</td>
</tr>
<tr>
<td>◊ useful</td>
<td>◊ unreliable</td>
</tr>
<tr>
<td>◊ useless</td>
<td></td>
</tr>
</tbody>
</table>

i) Databases

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>◊ indispensable</td>
<td>◊ reliable</td>
</tr>
<tr>
<td>◊ useful</td>
<td>◊ unreliable</td>
</tr>
<tr>
<td>◊ useless</td>
<td></td>
</tr>
</tbody>
</table>

j) Electronic journals

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>◊ indispensable</td>
<td>◊ reliable</td>
</tr>
<tr>
<td>◊ useful</td>
<td>◊ unreliable</td>
</tr>
<tr>
<td>◊ useless</td>
<td></td>
</tr>
</tbody>
</table>

8. Has a teachers or lecturers ever called in question the reliability and solidity of online sources of information that you referred to in an essay or thesis?
   ◊ yes
   ◊ no

9. Are you a participant in any social network, such as My Space, Flickr or Facebook?
   ◊ yes
   ◊ no

10. Do you participate in creating/modifying: (few answers possible)
    ◊ weblog
    ◊ Wikipedia
    ◊ forum
    ◊ subject gateway
    ◊ other ………………………

THANK YOU FOR FILLING IN THE QUESTIONNAIRE