

The Web 2.0 challenge to Information Literacy

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INFORUM 2007: 13th Conference on Professional Information Resources
Prague, May 22-24, 2007

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Introduction

The information world is buzzing with speculation of how Web 2.0 may affect us. Will it change the literacies with which we should be concerned? Is Web 2.0 not more about Information Technology change? Does it mean we have to change our conception of Information Literacy? Does it make Information Literacy more or less important? On reflection, these seemed to me to be the wrong concerns when we come to discuss the Web 2.0 challenge. Instead we should start with the educational background, what Information Literacy might mean, the desires of the Web generation and how they can now be met by applying Web 2.0 technologies. Use of these will challenge our own training and what and how we teach.

Information Literacy

First we need to be clear what we mean by Information Literacy. There are a number of definitions which are widely accepted. For the sake of this discussion I am restricting us to the latest UK definition by CILIP, our Library Chartered Institute, and the more comprehensive SCOUNL (Society of College, National and University Libraries) definition.

“Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner.”

(CILIP, 2004)

The following is based on the widely used SCOUNL Seven Pillars model.

- Recognising need for information
- Distinguishing sources and access
- Constructing search strategies
- Locating and accessing
- Comparing & evaluating
- Organising, applying and communicating
- Synthesising and adding new knowledge

The educational background and Web generation

Concerns in Higher Education at the moment include technological change, population change, competition, branding, rising student expectations, funding challenges, lifelong learning, concerns over learning and teaching methods, innovation, and dealing with what is becoming known as the Web generation. Large research libraries with silent aisles of large polished desks are no longer what many of our students require for their learning. They need to be able to carve out their own information landscapes. This generation dates from 1981 and wants single search boxes like Google and Amazon which give instant satisfaction. It finds our databases too hard to use and are not where they want to

work i.e. in their VLE. They are neither interested in Boolean logic nor in asking advice from librarians.

They like collaboration, teamwork and social networking and navigate the Web by trial and error and won't use manuals or help sheets. Research is seen as a self-directed process, which is likely to be non-linear. They have grown up with PCs and video games and are used to multitasking. They think that what is written down must be correct and will cut and paste rather than read and digest.

The Librarians' response

In order to connect with this Google generation many librarians have accepted their dependence on search engines, and sought to teach them the efficient use of Google, Google Scholar and Google Print where appropriate. The use of metasearch facilities from the library system companies has been promoted as an answer to bundled provision of data from a number of databases, but these have not yet been met with universal approval by librarians or users. Another approach is for librarians to act as information gurus, recommending search engines like Exalead, CrossEngine and Quintura.

Web 2.0

However, the appearance of the phenomenon known as Web 2.0 gives us a whole new bag of tricks to use and connect with our users. There is still controversy over exactly what Web 2.0 means and whether it is more hype than substance. Perhaps it is best to view it as a useful collective name to encompass a number of services, applications or tools which use the Web their platform and which encourage community and participation. Most important to librarians is that they allow tasks and creativity to be undertaken by non-technical staff and are often freely available on the Web at no cost.

Blogs are expanding on the web at phenomenal rate as individuals create these as a kind of online diary, as a distraction, to form an archive, converse with like-minded persons or form a democratic view. Non-one can deny the success of wikipedia or the potential wikis have for internal information sharing. Social networking (e.g. MySpace and FaceBook) is becoming the place where the internet generation spends time, communicating, creating their own space. Social bookmarking (e.g. del.icio.us) enables easy collection and access to individuals' bookmarks and sharing. Photo sharing is enabled by sites like flickr. Podcasting is allowing individuals to record, publish, find, subscribe and listen to audio over the internet on a portable player. Moving picture sites like YouTube are encouraging production, posting and sharing via the web. RSS feeds give us the ability to subscribe to services, and link to other users. Tagging allows us to give our own simple subject headings (tags) to blog posts, photos on flickr, books on LibraryThing, and these are shared and searchable by others. Mashups are websites or web applications which combine content from more than one source.

This is our chance to engage the web generation where they are, so that we become relevant and part of the Web 2.0 experience. Web 2.0 can enhance our web sites and teaching resources, making them more visual and attractive. We can use them to promote deep and active learning methods and peer-based learning.

What Web 2.0 means for our own development

If we are to grasp this opportunity it will mean developing new understandings of what the technology allows, learning new skills, embrace new ways of working. It will require experimentation and can be fun. Five Weeks to a Social Library <http://www.sociallibraries.com/course/> has been a great success in the United States recently and is now freely available on the web. The Library 2.0 in 15

minutes a day on the Library Instruction wiki at

http://instructionwiki.org/Library_2.0_in_15_minutes_a_day is also a very useful starting point.

Joining a social network is important and the developing Library 2.0 site from Ning is a good starting point, for understanding what these sites can offer, developing your own space, making “friends” and online discussions.

How do Web 2.0 tools affect the content and delivery of our Information Literacy teaching?

Blogs

The “blogosphere” can be viewed as a kind of global brain and a vital part of online culture.

Blogs are primary sources and can contain some of the most current opinion on the web and are becoming a valid source to get the latest ideas about a subject. However, the task of selecting from the over 72 million blogs will require some assistance from librarians. Whom do you trust? Tools like Technorati and Blogpulse can be useful aids. Advice on the evaluation of blogs can be gained from Kathy Schrock’s Guide for Educators Critical Evaluation Surveys & Resources.

<http://school.discovery.com/schrockguide/evalblog.html>

Blogs can help to develop writing skills, encourage community and reflection, and thereby assist deep learning. With the support of academic staff (particularly in agreeing the software to be used – e.g. Blogger or Blackboard) they could be used in our teaching, with student content being collected into the teacher’s aggregator. Students doing major pieces of research could be encouraged to keep a blog as a way of recording progress, managing their time and reflection. They could be used to build up evidence of their progress and to gather opinions from peers or instructors.

RSS feeds

RSS feeds provide the glue which link us to the content which we want to read.

The feeds can allow students and researchers to subscribe to regular content from news services, blogs and relevant content from databases. They can create their own information world, choosing their content which then comes automatically to them, keeping them up to date. They may choose to use an aggregating service like Bloglines which collects the feeds from all their sources into a common format for swift browsing. Promotion of these to advanced researchers facilitates access and regular update of content concerning their chosen subjects.

Wikis

Wikipedia’s popularity is such that we cannot prevent its use by our students. A recent Pew/Internet report from the USA showed that 36% of online American adults consulted Wikipedia. We should acknowledge its legitimacy as a starting point for research but teach how it should be measured against other reference sources, and understanding its strengths and weaknesses. There have been problems with bogus posts. Rules and guidelines have had to be imposed and an arbitration committee set up to settle entry disputes. Robots also troll around the site looking for obvious vandalism. Despite this, Wikipedia can be a wonderful way of showing how easy it is to post information on the web, and for considering how knowledge is built up. It leads to the central question of the validity of any piece of information and why we should trust it. In a Web 2.0 world this will become increasingly important for users to understand.

The creation of wikis to encourage group work and peer review is being trialled with the assistance of academic staff again after decisions of which software to use are made. e.g. Moodle, PBWiki, or Blackboard?

Podcasts

We need to teach ways of searching for podcasts e.g. <http://podcasts.yahoo.com>. Librarians are already using them for library instruction, especially for distance learners. Access can be via iTunes, allowing users to jump around chapters. Podcasts can be effective for academic star performers with wonderful voices!

They allow students to time-shift and can be used in a car, while jogging....anywhere.

Social bookmarking

These services make book marking much easier and portable between PCs. Connotea, CiteULike and del.icio.us are the most well-known. Del.icio.us can be used as a research tool to help students to organise what they find and bookmark easily, accessible anywhere. It can assist referencing and encourages them to tag, which is central to the linking of ideas, and aids sharing of resources. Individuals will use different tags according to their own interests, but when these are shared with others, this tagging can expose new links, which in turn lead to discovery of further resources.

Tagging

Tagging can become part of critical thinking, making links which involve evaluation, categorising, and formulating keywords.

They can assist understanding of subject headings and summarising a topic. Tag clouds can be useful for browsing similar concepts, narrowing or widening terms. Some librarians are being critical of tagging and compare it unfavourably with tradition taxonomies as used in classification schemes. However, the possibilities opened up by tagging may prove popular with our users and useful to develop and encourage student research. Perhaps most interesting is the tagging of catalogue items as piloted at the University of Pennsylvania in their PennTags facility. See <http://tags.library.upenn.edu/>

LibraryThing

Librarians who want to trial social networking tools should first consider LibraryThing and Library 2.0. The former enables the storage of details about books which have been read. (i.e.cataloguing). Brief descriptions, reviews and tags can be constructed. The information is then shared with others who have read the book. This may foster alternative and additional reading, based on their opinions and favourites. Rather like a book club, this could be used with groups of students to encourage reading, sharing of favourites and critical review. Library 2.0

YouTube

This service, although limited to a ten minute format and of variable technical quality, can be used to create our own YouTube videos for promotional programmes and tutorials. Some of the best examples have used students as presenters, and their involvement in planning is crucial. Librarians now also have an interesting teaching resource in YouTube material for use in our teaching to trigger discussion.

<http://www.youtube.com/watch?v=xFAWR6hzZek>

Instant messaging

The OCLC Perception of libraries & Information Resources report of 2005 highlighted the use of instant messaging as a popular method of communication for students. This medium may appeal to reticent students who shy away from using desks and other help mechanisms. Experimentation with this form of communication may be attractive to some libraries. E.g. Pennsylvania State University has sent messages on IM to vulnerable students, offering library assistance.

Flickr

Flickr is now the most popular storage repository on the web for photos. It has a number of uses for librarians to consider. Photos of our library, staff and students, its presentations, classes, and events, can be stored quickly and efficiently. Easy access will be enabled and possibilities of sharing with others. Library groups are being formed and this photo sharing, along with general images under the Creative Commons licence gives us a huge bank of material for use in our presentations.

The future

Further developments to these tools, alongside new ones, are proceeding all the time. Large scale change may be expected through the introduction and widescale adoption of the Iphone. The desire to link as much as possible into one device is very strong, and the speed of its adoption will depend on competitive pricing. The other area to watch over coming months is SecondLife, which is more than a game and may prove to have possibilities for role-playing and dummy libraries in IL teaching.

Conclusions

The needs of the Google generation, reinforced by the developing Web 2.0 information environment, are increasing the importance of Information Literacy. This means that we should trial Web 2.0 tools to help us to connect with this generation, but remember the software can be like a free kitten! In our teaching we must spend more time explaining how information is created and communicated, help students to develop a sense of context when using information, encourage scepticism and the ability to evaluate, guide them toward assimilation, deep thinking, and reflection, and insist on the ethical use of material.

We can play a key role in creating information literate citizens. We now have a whole new set of tools to enhance our delivery. It's a world of perpetual beta so we should experiment. We need only be constrained by our imaginations to engage our users as never before!

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