Reflecting the individual use of Web2.0 tools

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Introduction

Nowadays the Web is playing a major role in living, learning and politics. In organisational settings the Internet is increasingly influencing internal and external communications and promises to weaken hierarchical information processes and democratize the exchange of information. Our endeavours, in the context of the "Web Literacy Lab" (WLL) project[1], concentrate on the reflection about the use and the impact of Web 2.0 tools in organisations, the research if and in which ways companies are using these tools and the design of proper trainings to support companies in their dealing with new technology. We started our investigation in January 2011 with a close observation of our own group and conducted a pilot survey to reflect and discuss the diverse and individual approaches of the team members of the WLL. It was important to carry out the survey at the beginning of the project, because we suppose that our online behaviour and attitudes will change through our intensive use of mobile devices during the project activities.

Definition of web literacy

Heinz Wittenbrink refers in his blog to two levels of web literacy, the level of skills and the level of sensemaking in the web (Wittenbrink 2011). At the level of skills Wittenbrink relates the Model View Controller Pattern (eNode 2002) - models for maintaining data, views for displaying data, and controllers for handling model or view – to the users' activities on the web: organization of information, production of text, media and networking. The approach of sensemaking takes into account the construction of the web by active and passive internet users and by the creation of identity and relations (Weick, Sutcliffe & Obstfeld 2005).

Method

To better understand web literacy in the context of our own team we designed a framework by categorising the types of the web tools we are using on the one hand and asking for detailed information about the group members' individual use on the other hand. We then used the framework to fill in information about: a) our most usual activities, b) how long the tool/s are in use, c) the intensity and frequency of the use, d) whether the use happens on a website or on a mobile device/smart phone, and d) the competences we need to carry out these actions. Following the gathering of information on the framework, we reflected our "sensemaking" in the web via storytelling and discussed the findings, individual behaviours

and personal considerations in a team meeting. Nine (9) from the eleven (11) team members took part in the survey, six (6) female and three (3) male, age between 25 – 54 years old. All team members are working at the FH JOANNEUM, a university of applied sciences, in the study degrees "Journalism and Public Relations" and "International Management" as well as in the research institute "ZML – Innovative Learning Scenarios".

Web tools in use

In the categorisation of web tools we came up with a list of twelve (12) tool types: 1) WIKIs, 2) blogs and microblogs (e.g. the service twitter), 3) video production and sharing, 4) audio production and sharing, 5) photo production and sharing, 6) geotools, 7) document production and sharing, 8) organisation of knowledge sources (RSS, ...), 9) social bookmarks, 10) synchronous communication (e.g. skype), 11) social networks, and 12) searching tools.

The vast majority of the team members started with the regular use of most of the web tools during the last 5 years. The early adoption of the web technology (90s and early 00s) concentrated on the use of search engines and the latest tools used (adoption after 2009) are the geo tools.

Looking at the most frequent activities carried out with the tools it was not surprising to see that most of us are not only passive consumers of information found in the web, but are actively participating in the generation of content. We use the tools to share ideas, our own work and our photos in wikis, blogs and micro-blogs, use document sharing services, participate and organise audio and video web conferences. Web tools are also used for structuring own thoughts and generating knowledge.

Web tools for organisation of knowledge sources as well as for audio and video production are used by less than half of our team members. A very low level of participation in the category of "organisation of knowledge sources" show confusion and lack of shared understanding between team members about the tools this category is addressing. Although the production of text and photos is a competence taken for granted, we mostly use videos and audio files as passive consumers. A couple of reasons for this finding could be that the generation of such content needs more specialised expertise and is more time consuming.

Key competences

Here is a list of the competences mentioned for each tool category, starting with the competences that were mentioned more often.

1. Wikis: writing with codes (eg. marc up language), searching methods, getting an overview of the actions the technologies makes possible and finding out how to use

them, facilitation of collaboration and cooperation, html knowledge, screening for relevant information, structuring information for use in different context (eg. teaching, didactics).

2. Blogs and microblogs: use of web tools to aggregate and manage information, filter relevant information, documentation skills, web tool use, knowledge about the conventions of participation, writing for online publishing and for blogs, use of links

3. Video production and sharing: searching methods, video production skills

4. Audio production and sharing: recording and editing audio files, use of iTunes, reporting without being nervous, podcatchers (RSS-reader for podcasts)

5. Photo production and sharing: web tool use, photo organisation, connect to social networks

6. Geotools: web tool use, get used to public visibility of current location, choose audience

7. Document production and sharing: web tool use, knowledge management, handling with files, organisation of data

8. Organisation of knowledge sources (RSS, ...): update sources, writing for newsletters

9. Social Bookmarks: knowledge management, categorisation, choice of sources, writing short summaries, tagging, network with other relevant contributors

10. Synchronous communication (e.g. skype): web tool use, handling of headset and camera, social skills, multitasking (talking, writing and organising), moderation, contact management

11. Social Networks: networking, filtering contacts, knowledge of conventions of participation, choice of contacts, choice of statements, creation of and participation in communities and groups

12. Searching tools: formulation of search wording (search syntax), "seems to be harder than it seems", filtering findings, use of advanced search

A very interesting aspect of the key competences mentioned for the use of each tool category was that they often don't involve technical skills for the tool use and that they go beyond the technical use itself. Knowledge of how to use the tools is often replaced with skills for "getting an overview of the actions the technologies makes possible and finding out how to use them" and accompanied with "knowledge of the conventions of participation".

In the discussion emphasis was given on the organisation of information found on the web, as well as information, input and content generated in work groups.

Considerations of gender

The identification of gender aspects in the use of the web tools has not been easy in this first step, since most team members who participated in the survey were female (6 women to 3 men). One aspect that could be relevant is that active users of web tools on mobile devices/smart phones appeared to be the male team members (2 out of 3 male members actively using one before the start of the project). These two members are also active users of Foursquare, a location based SMS (Short Messaging System), in which users make their current location visible for all users of the same system. Privacy and the publishing of personal information has been the topic on which we spent most the time discussing, arguing about the need for a definition. In the discussion logs we see that privacy is an aspect mentioned by both genders in a way indicating incompetence in this area. A male participant writes "In general I cannot separate between private and work use of the web tools". Although the technology we use does offer possibilities for separating "private" from "work" content and interactions, we seem to be "unable" to separate them. Issues of control and feelings of stress caused by the technology and by the time consuming organisation of information were only mentioned by the female team members, whereas only one male team member mentioned that "trying out new tools is fun" (assumption of fun oriented male approach to technology) and only one female participant pointed out that "the focus of technology use should not concentrate on what the tool itself can do, but more on the goals we wish to achieve by using them" (assumption of goal oriented female approach).

Limitations of the survey and future steps

This survey reflects many of the subjective experiences and assumptions of the researchers and the members of the WLL team and can only be seen as a first step towards a systematic observation of the web tool use in our team. It has been however very useful for us, because it helped us identify the aspects of our practice that are interesting for the team members and for the aims of the WLL project, work towards a shared understanding of terms and plan our future activities. Our experience with the design of the framework used for gathering the data and our deeper understanding stemming from the discussions and arguments in our team will be used for the design of our next study. It is very interesting that during the 2-3 months in which the survey was carried out our team was changing and deepening its practice with the tools through the use of smart phones and tablets (iPad's). On the one hand this development was driven by the project itself (each member received/had the choice of receiving a mobile device), but on the other hand it was based on individual decisions as well. As our use of mobile technology is growing we plan to repeat the survey in about 1-2 years to gain an understanding about how our use of mobile technology and smartphones is

changing our use of the web tools and our participation in social networks. An interesting observation in our further surveys will also be to observe, to which extend our gender assumptions will continue to exist and whether there will be differences in the development between the two genders.

Notes

1. http://www.fh-joanneum.at/aw/home/Info/News_Events/News/~ccwk/Web_Literacy_Lab_JPR

References

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