

BOBCATSSS 2010 @ Parma, Italy

Dates: Monday 25th, Tuesday 26th, Wednesday 27th January, 2010

Bridging the digital divide: libraries providing access for all?

"Digital literacies for amateurs and professionals"

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Abstract

Information literacy education can benefit from a balanced view of different literacies and thoroughly scrutinized approaches to their relationship to amateurs and professionals. An analysis and synthesis of an interdisciplinary body of the literature shows that the most prevailing concepts are information literacy, digital literacy and media literacy. An overview of these literacies is provided.

The discussion of literacies is unimaginable without taking the Web 2.0 and of the attention economy into consideration, determined to a high degree by social interaction with the participation of amateurs. There are not equally influential in different information

institutions. The vast majority of amateurs can make good use of public library services or uses other libraries for non-professional purposes. It is scholars, who continue to require "traditional" "professionally-minded" services, even though they heavily rely on informal information gathering. They require a different kind of literacy, similar to the traditional conception of information literacy.

Introduction

There is a growing academic interest towards questions of literacy, with emphasis on exploring it under the circumstances of the digital era, displaying a multidisciplinary mix of specialists in cultural studies, history, communication and media studies, human-computer interaction, linguistics, literary theory rhetoric, social studies of technology as well as library and information science (Livingstone, 2004).

The roots of interest in contemporary literacies can be found in the emergence of post-typographic forms of text production, distribution, and reception that use digital electronic media on the background of growing need in information in society and the need for lifelong learning (Lanksher and Knobel, 2004).

Information literacy, media literacy and digital literacy

Besides of *information literacy*, which is a relatively well known subject to librarians, there are two literacies that are strongly present in the professional literature, even though not receiving the same emphasis and weight: media literacy and digital literacy. The latter is multimodal, i.e. it requires fluency in a broad range of competencies that enable us to consume and create texts in visual, audio, and written formats, to evaluate messages that are constructed in a variety of media with a proper social awareness of the global society (Cordes, 2009).

According to the widely accepted definition by Street, literacy is conceived as "social practices and conceptions of reading and writing" (Street 1984).

There are many literacies that can be identified within varying social contexts and under varying social conditions and the nature of which is changing within the conditions of textual work (Lanksher and Knobel, 2004).

Contemporary concepts of literacy include visual, electronic, and digital forms of expression and communication. Literacy has broadened in scope, as it is tied to technology and culture, and the ability to become and remain literate requires a long term commitment (Cordes, 2009). Being literate includes both *having erudition* and *being educated*. However it is useful to know the differences between literacies of the digital world and erudition, education and culture

The literacies, we are addressing in this paper are of cultural nature in a broad sense, while being tied to digital technology, as well. The cultural dimension of these literacies shows influence of self-generated amateur content that is induced by the sweeping popularity of the Web 2.0.

There seems to be no need to repeat the definitions of information literacy. Instead we can characterize it as follows. Information literacy emphasizes the need for careful retrieval and selection of information available and places prime emphasis on recognizing message quality, authenticity and credibility. Information literacy education emphasizes critical thinking, metacognitive, and procedural knowledge used to locate information in specific domains, fields, and contexts (Hobbs, 2006).

Information literacy has strong positions despite some (well founded) scepticism, expressed by Bawden and Robinson (2009), who state that this concept and especially the *lack of information literacy* has always seemed to be of more importance to academic librarians, than to any other players of the information and education arena.

Media literacy can be identified as a movement, which is designed to help to understand, to produce and negotiate meanings in a culture of images, words and sounds. According to this definition media literate persons can decode, evaluate, analyze and produce all media, with the aim of achieving critical autonomy relationship towards both print and electronic media (Aufderheide, 1992).

As a term, media literacy has mostly been applied to only K-12 education. Despite some controversies, however, media literacy is also applicable to higher education (Mihailidis and Hiebert, 2005).

Media literacy and information literacy are coupled by the requirement of critical evaluation, regarded in both cases as a kind of default quality. In the case of media literacy this can be an examination of the *constructedness* of media messages (Hobbs, 2006).

Information literacy and media literacy are umbrella terms, thus they display high levels of complexity. Nonetheless, there seems to be need for multimodal literacy which is promising a synthesis of multiple modes of communication that results in a transformation of the singular modes into forms that produce new or multiple meanings (Cordes, 2009). Digital literacy also strives towards this synthesis: it is multimodal. Paradoxically, it is often used in a restricted meaning, denoting the effective use of ICT exclusively.

In the proper sense, however, it can be defined as "the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process" (Martin, 2006).

A distinctive feature of digital literacy is that it "touches on and includes many things that it does not claim to own. It encompasses the presentation of information, without subsuming creative writing and visualization. It encompasses the evaluation of information, without

claiming systematic reviewing and meta-analysis as its own. It includes organization of information but lays no claim to the construction and operation of terminologies, taxonomies and thesauri" (Bawden, 2008: 26). The concept of digital literacy includes awareness of the value of traditional tools in conjunction with networked media and social networks (Bawden, 2001).

Amateurs, professionals and the Web 2.0

The library world must be aware of the opportunities and threats of the Web 2.0. However, beyond this there are complex issues and sometimes paradoxes that are related not only to technology. Many questions are thus matter of debate, including whether Web 2.0 developments threaten traditional library services or not. It is extremely difficult to answer this and similar questions as the long-term effects of the Web 2.0 on the library profession are far from clear (Bawden et al, 2009).

The name itself or more exactly the suffix '2.0' causes problems. The term 'Web 1.0' was never used before thus we have to aware that it implies that there is some kind of 'old version' of the web. Such approach, however, decontextualizes the Web historically. Culturally it creates an anxiety similar to that which is utilized in advertising that last year's model is 'outdated' for no other reason than to sell year's model. This decontextualization results in the fact the Web 2.0 has been said both to harness collective intelligence but also to encourage mob stupidity (Everitt & Mills, 2009). It is not accidental that the term *Library 2.0* can be qualified as controversial (Secker, 2008).

The Web 2.0 itself is an uncertain term, as it covers many different things, some in conflict, some overlapping with each other, but in any case ontologically non-compatible. It is a conceptual frame, including ideas, behaviours, technologies and ideals. Many current Internet

developments, activities, and applications can be understood as examples of Web 2.0. However they do not themselves constitute it (Allen, 2008).

What is certain, that emphasizing critical thinking and conscious selection of information does not correspond with the ethos of the Web 2.0. In general, it is characterizes by an utterly uncritical attitude.

The central value of the Web 2.0 is participation. Or, rather there is an illusion of participation raised by the rhetoric surrounding the Web 2.0. Participants submit content freely "in the belief that they are communicating a message rather than just adding more verbiage to the already torrential »infostream«" (Everitt & Mills, 2009:762).

These are the amateurs of our era. They are producing content, but the central value of their activities is not producing quality, pursue aesthetic or being critical, even though they do not perceive it. They are encouraged to be there where other people are and are supposed to produce anything independently from its goals and values, as advertisers want more and more members and more activity (Cox, 2008).

Amateurs are the "ordinary people" who produce a large number of postings on the Web that never receive the slightest attention. As Bridges (2008) expresses it, "there is already far too much information coming at us for us to make good use of it, or indeed to take it in at all".

All this leads to a new digital divide between those who own repositories of user data and those who are mere content creators. The former build their revenue streams from the free labor of the latter (Everitt & Mills, 2009).

Someone may not be interested in knowing that "today, perhaps more than ever, fewer and fewer people can become richer and richer by using the very many who earn less and less" (Scholz 2008). It is not our primary goal, either. However, to be aware of these circumstances is necessary to have a full picture about literacies of the digital age.

If speaking about having a full picture, we cannot deny the usefulness of applications based on Web 2.0 techniques and developed by libraries. This is especially true as they are professional services even though they use the tools geared towards amateur users by virtue of their ease of use and very low level of computing and handling competences required by them. These useful tools can serve library user properly. Nonetheless, they have little relevance for literacies.

When Lessig (2007) defends amateurism with the thought that the things created by amateurs are great, he adds something important: that these contents are not as great as those created by professionals. This directs our attention towards the need to differentiate between content created by amateurs and professionals. Whatever the motivation behind, amateur contents may be useful or at least tolerable. However, they cannot substitute content created by professionals and used for professional purposes.

The problem of the so called wisdom of the crowd is of interest for our discussion. It is based very much on ranking documents, information and knowledge according to their popularity (Cope & Kalantzis 2009). People gathering somewhere and being together are not necessarily wiser than the individuals that constitute this crowd (Csepeli 2008).

The irresponsibility and lack of expertise causes the lack of ability to mutually correct errors and mistakes also in cyberspace. We know that there is no guarantee that it is possible to filter out rubbish and misinformation and erroneous interpretations of reality if the participants are incompetent (Csepeli 2008).

Amateur and anonymous production that characterizes the Web 2.0 is different from the production of professional and academic knowledge. The property of the latter is the importance of credentials and authorship (Cope & Kalantzis 2009).

The content of the social networks is everyday personal details and the goal on surface is to make connections with online "friends" that become *the* commodities of Web 2.0 (Beer & Burrows, 2007).

The approaches towards agreement, cooperation and shared knowledge are also different among the amateur users of the Web 2.0 and researchers. Agreement is in fact not needed on social networks or even users of tagging, social bookmarking sites. They may not take the opinion of other users into consideration. Academia, on the other hand, is well-known for its epistemological richness and diversity. It would be difficult thus to reach agreement among researchers on the epistemological status of their domain (Yuwei, 2008). Nonetheless, principles of scholarship still apply, except if new scientific paradigms are taking their place. Ideas of participation appeared in LIS literature much earlier that the idea of the Web 2.0. This was the concept of the *information player*. It is based on the idea that while library patrons take what they are offered, and make the best of it, players are much more active. They take part in deciding what they need, and what should be provided for them and they may even start to supply information to other players. The concept of the information player brought a new view on potential new roles for librarians and information specialists: functioning as managers, coaches or trainers (Nicholas et al, 2000).

Participation in a different meaning is also familiar to information literacy education, even though on a different ground. As Harris (2008) points out, information literacy requires community and that a complex view of it goes beyond the individual learner and requires an understanding of the interrelation between community members and their processes related to information, knowing the social, political, and cultural characteristics of a given community. He goes on saying that information literacy "requires interaction between people and the involvement of people with texts produced by others, making information literacy events intersubjective in character" (249).

It is a different question that the more traditional definitions of literacies, especially those of information literacy, see ordinary people as receivers but not senders of messages. On the other hand, we witness an explosive growth of online publishing, with an increasing number of writers (Beeson, 2005). In this environment writers have to realize that they are reaching a much wider and more varied audience, that comprises both specialists and laymen (Chan & Foo, 2004). It has to be mentioned in this regard that digital literacy reflects this environment as it encompasses not only selection but production as well (Bawden, 2008). Information literacy is capable of this to a lesser extent, even though its boundaries can be extended to include verbal communication (Koltay 2007).

With the "ordinary people" increasingly becoming producers of information, the questions of critical thinking and conscious selection of information is becoming an issue of special importance. Obviously, digital literacy, while including production does not abandon critical approaches. Related to this the problems of quality control also have to be mentioned. Badke (2004) is of the opinion that gatekeepers to reliable information still exist and they still have great value. However we can publish without them. He adds that the Web is more a vehicle for information than a content-provider. It is still used for transmitting products that have gone through rigorous quality control. He also points towards a broader context of gatekeeping: the nature of electronic documents. Besides the well-known features, like perpetually contemporary look, instability of content and form, etc. he point towards the following: "The fact that an electronic document can be created and flashed around the world in an instant may also mean that half-blown ideas can be shared as if they were the more well-formulated concepts of a print document. With this we lose certainty that was provided by the normal checks and balances of the print environment. Instead the readers have to become the gatekeepers, provided that they enhance their evaluation skills (Badke, 2004).

Tailor-made literacies

Different literacies have to be offered to different groups of users, similarly to traditional library services that cater for different user needs depending on the type of the given library. Such an approach has to be supplemented by tailor-making appropriate literacies.

One of the main lines of division between differing needs seems to be in the goals: whether users use information for entertainment or intend to use it for professional goals and if they recognize this. Thus there is a different need for literacy by teaching staff and researchers and by other categories of users.

Professional goals require higher level of reliability and have a higher potential in the knowledge creation process, thus less amendable to Web 2.0 applications. Such content has to be offered to students, teaching staff and researchers when they are fulfilling their professional roles. The professional nature of teaching staff activities is self-explanatory. Students are in many regards professionals who are usually requested to show lower levels of performance than the one produced by teaching staff members and researchers.

Amateur content dominating Web 2.0 is useful mainly to public library users and amateur content could be offered to students in their quality of consumers. When differentiating these two main categories, both advantages and drawbacks of Web 2.0 applications should be weighed.

In this regard it is useful to contemplate what Crawford (2006) says. His thoughts, albeit somewhat differently, express the above. He states that public libraries have never been most people's primary source of current information, even though libraries provide specialized and secondary information and serve for those who have no other information resources. Public libraries are not the first place to look for information in general because such a role "overstates the capabilities of public libraries even as it impoverishes the library's roles as place, as collection of narratives (stories, if you will), as builder of local history, as the place

kids learn to associate reading with fun...and so many other library successes." He adds that in some Library 2.0 messages is a view of public libraries and their missions that is quite different from this. While agreeing with this, we can say that serving the amateurs is the closest possibility of using the Web 2.0 properly. This can happen – we repeat – in the public library and not in the academic one.

Tailor-made literacies are suitable to provide not only adequate content, but offer a considerable level of comfort. Thus they correspond to the traditional value system of library services.

In more general and service oriented context, we can see that there is a difference between "being where our patrons are" and "being useful to our patrons where they are." We have to be aware of this, even if we know that user behaviour on the Web 2.0 can be characterized with the following sentence: People like to be where other people are (Scholz, 2008) and this seems to be one of the motifs of participating in Web 2.0 related activities, even though the motivations on the whole remain unclear (Beer and Burrows, 2007). We can agree thus that just putting up a profile in any of the social networking sites does not make the library seem cool or more visible (Farkas, 2006). This statement underlines that flashy technology without content and purpose, is useless (Bawden et al, 2007).

Conclusion

Form the above discussion it is clear that there is no single literacy that is appropriate for all people or for one person over all their lifetime. Literacies require constant updating of concepts and competences in accordance with the changing circumstances of the information environment (Bawden et al, 2007).

Digital literacy, nonetheless, has good chances to become a literacy that is designed not only for the information professionals but a much wider audience. Being a multimodal literacy it requires "in part a new sensibility, one that promotes a self responsibility for the acquisition and use of knowledge that is flexible, exploratory, and ethical" (Cordes, 2009).

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