WEBLOG PUBLISHING AS SUPPORT FOR EXPLORATORY LEARNING ON THE WORLD WIDE WEB

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ABSTRACT

The paper examines how publishing "weblogs", personal learning journals, on the World Wide Web, can support exploratory learning on the World Wide Web. It describes the emergence of social networks that form between weblog authors and their readers and analyses their consequences.

1. INTRODUCTION

"The Internet acts as a type of Rorschach test for educational philosophy. When some people look at the Internet, they see it as a new way to deliver instruction. When other people look at it, they see a huge database for students to explore. When I look at the Internet, I see a new medium for construction, a new opportunity for students to discuss, share, and collaborate on constructions." (Resnick, 1996)

Many self-organised learners are using the Internet for exploratory learning. A growing number of them is also publishing "weblogs", personal learning journals, to the World Wide Web. In this paper we first examine how weblogs are beneficial to exploratory learning processes. Then we explore possible dangers to exploratory learning which lie in the emergence of social networks around weblogs. We then make suggestions for further research possible ways of connecting our findings to educational settings.

2. EXPLORATORY LEARNING

Exploratory learning is an active process in which a learner consults many different sources to find out and construct his own meaning. Balancing between challenges and abilities, exploratory learners get into deep concentration and flow, giving them instrinsic reward. Exploratory learners are always intrinsically motivated; it is not possible to force this learning style upon a learner, it is only possible not to hinder them learning exploratively (Holzkamp, 1995).

The necessary conditions for exploratory learning are

1) The learner has to have control over a) what he learns (topic and order), b) when and how fast he learns, c) at which level of difficulty he learns, d) in what way he learns (socially or not, which media he consults, how strong his focus is), e) whether he learns at all. (Schneider, 2001)
2) The success and process of learning is not assessed externally and predictably (while unpredictable external rewards do not harm intrinsic motivation) (l.c.).
3) The speed, success and process of learning can be reflected by the learner (Döring, 1997).
4) It is possible and "safe" to make mistakes either because the learner's social context tolerates or even positively answers mistakes or because the learning context is independent of the learner's social context, so learning mistakes do not immediately lead to negative consequences (Waldow, 2000).
5) The learner is very comfortable with the media he uses (DiSessa et al., 1995).

3. THE WORLD WIDE WEB AS AN ENVIRONMENT FOR EXPLORATORY LEARNING

The World Wide Web is a "worldwide electronic library" that today is accessible for almost anybody in the developed world. Its vastness and hyperlinked structure make it an ideal medium for individual exploratory leaning (Eberle, 1998; Schulmeister, 2002). Users can decide on their own with what speed they browse information and how much time they spend on individual items. They are exposed to different sorts of information, ranging from simplified material to scientific papers. It is up to them to decide whether to accept the difficulty level of a publication or to move on to something else. They can and have to browse freely and spontaneously, as there is no central instance that decides for them which content is relevant. It is up to the learner to discover or even create the structure of what he learns.

However, the lack of guides and the quality of the content found on the World Wide Web is also a problem. Often, it is very difficult to find relevant material and good starting points to explore from. Navigating the web also poses difficulties: While the basis of the web are hyperlinks, currently the web has a strong hierachic structure. (Swan et al., 1998, as cited in Eberle, 1998). Links to other sites are often of low quality and do not help the user in contextualising what he is currently reading. For exploratory learning on the world wide web it is therefore critical to have "media literacy" skills to judge the quality of the material found and to be able to cope with the seemingly endless choices one faces.

It should be noted that exploratory learning on the World Wide Web is especially suitable in disciplines in which multiple perspectives are valued, such as history, politics and economics and other fields of the humanities (Simon, 2003). Where "true" knowledge is sought, exploring the World Wide Web can prove ineffective and inefficient.

4. WEBLOGS AS SUPPORTING TOOLS FOR LEARNING ON THE WORLD WIDE WEB

"Weblogs" are a relatively new genre of personal, diary-like websites that have rapidly gained popularity over the last years. They are built by using very simple, usually web-based content management systems that enable anyone regardless of technical skill to publish to the World Wide Web. While many weblogs are used solely for private purposes, professionals and students are increasingly using weblogs as personal knowledge repositories and learning journals. (Efimova & Fiedler, 2004)

4.1 Weblogs as public learning journals

Long before the advent of hypertext or the internet, learners have used journalling as a technique to capture knowledge. This is beneficial to the learning process, because it lets them connect new information to what they already know and reflect on texts written in their own authentic voice (Kerka, 1996). Weblogs are personal learning journals published on the World Wide Web. As they are globally accessible, they can potentially attract a large audience and generate feedback. This makes them personally relevant works of their authors which intensifies learning (Döring, 1997). The presence of a real or assumed audience also leads to special forms of reflection, which can be described as "intrapersonal conversations" (Wrede, 2003).

4.2 Weblogs as Cognitive Tools

Cognitive Tools are defined by Jonassen, as having the following characteristics: 1) The learner is in control 2) the learner is actively engaged and 3) the synthesis is created by the learner himself. (Jonassen 1992, as cited in Abplanalp, 1997) Weblogs can thus be characterised as Cognitive Tools and as such should stimulate metacognition (l.c.). While systematic collections of data are still rare, observations of weblog authors personalising their weblog environments seem to indicate that their authors are indeed reflecting on their mental processing and their learning process (Fiedler, 2003).

4.3 Weblogs and discourse

Weblog authors are not alone. Supported by Google and special tools created around personal web publishing, they will quickly find and be found by other authors and connect with them by hyperlinking. Through email or weblog-specific features such as commenting (the ability to attach a comment directly onto another person's weblog entry) or "TrackBack" (a feature that shows "inbound links" from other weblogs to a particular weblog entry), authors can get into discussions with their readers and other learners.

Feedback received from others will often add to gathered information, giving other sources to consult, thus opening up new perspectives (Wrede, 2003). Furthermore, weblog-authors will get into discussion and discourse with other learners. Often described as "weblog-conversations", discourse carried out over weblogs can trigger iterative reflection and explication (Fiedler, 2003).

5. THE EMERGENCE OF SOCIAL NETWORKS AND THEIR CONSEQUENCES

Every weblog has a social ecosystem that is manifested in links. Most clearly this can be seen in the form of "Blogrolls", lists of other weblogs that weblog authors publish on their sites. Research also indicates that the social aspects of publishing a weblog are very important for authors. Efimova & Fiedler (2004) state: "Many weblog authors note social effects of weblogging such as amplified networking and relation building, finding people with similar interest or new friends, and community-forming." and continue: "We can already observe that certain features of the weblog publishing format and particular practices that the weblog user community has developed support the growth of rather stable networks and community like [sic!] structures." Already, we can see communities of practise, such as "BlogWalk" (a network of weblog researchers, see http://blogwalk.mediapedagogy.com/) and even organisation-like structures emerge from loosely coupled weblog networks (see Zijlstra, 2003).

While reading other weblogs and conversing with other learners can be beneficial to learning in many ways, it may also have adverse consquences to exploratory learning: Knowing that he has an audience might turn a learner from a reflective journaler into a "publisher", publishing not for himself, but rather to an audience. This way, he will no longer learn exploratively, but towards a goal: The publication of interesting pieces for his readers.

Also, the social ties created with readers and other webloggers may hinder free, reflective publishing. While generally discussions in the "blogosphere" (the network of weblogs) are constructive, weblog authors might also find themselves in a position where they are being criticised or even attacked for publishing "wrong" things. This social corrective might put off authors from publishing freely and instantly and rather make them wait until they have come up with "finished" thoughts and conclusions. This way, the conditions for exploratory learning would no longer be given.

No research has yet been done to study these adverse effects of personal publishing on the World Wide Web to learning.

6. CONCLUSION

We have shown that weblogs can support exploratory learning on the World Wide Web, improving reflection and opening up new possibilities of discourse. However there are also indications that the connectedness of weblog authors into social systems that emerge through their publishing may have adverse effects.

As exploratory learning is a critical skill for knowledge workers we believe that further research into how personal publishing supports learning is imperative. It should not only focus on positive aspects: It should analyse how the emergence of social networks changes a weblog author's publishing behaviour and how this affects his possibilities of exploratory learning. This also creates the possibility to connect to educational settings: Can educational settings such as publishing weblogs to a closed audience in the context of a course protect learners from the negative effects of publishing on the World Wide Web? How can the positive effects of personal publishing be maintained in a controlled setting?

We believe that reading and publishing weblogs hold great potential for self-organised learning and may also improve constructivist learning approaches in educational settings.

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