Academic Weblogs as Tools for E-Collaboration Among Researchers

María José Luzón
University of Zaragoza, Spain

INTRODUCTION

Although scientific research has always been a social activity, in recent years the adoption of Internet-based communication tools by researchers (e.g., e-mail, electronic discussion boards, electronic mailing lists, videoconferencing, weblogs) has led to profound changes in social interaction and collaboration among them. Research suggests that Internet technologies can improve and increase communication among nonco-located researchers, increase the size of work groups, increase equality of access to information by helping to integrate disadvantaged and less established researchers, help to coordinate work more efficiently, help to exchange documents and information quickly (Carley & Wendt, 1991; Nentwich, 2003). There is abundant research on new forms of group work originated from the use of computer technologies. Carley and Wendt (1991) use the term extended research group to refer to very large, cohesive, and highly cooperative research groups that, even being geographically dispersed, are coordinated under the supervision of a single director. The term collaboratory is also used to refer to similar groups (Finholt, 2002). Although there is much research on how Internet technologies are used by unified and cohesive work groups to collaborate (e.g., Moon & Sproull, 2002; Walsh & Maloney, 2002), less attention has been paid to how the Internet facilitates collaboration among researchers outside these highly cohesive groups. Weblogs (blogs) can become a useful tool for this type of collaboration and for the creation of virtual groups. Weblogs are frequently updated Web pages, consisting of many relatively short postings, organized in reverse chronological order, which tend to include the date, and a comment button so that readers can answer (Herring, Scheidt, Bonus, & Wright, 2004). They enable users to communicate with a worldwide nonrestricted community of people in similar fields, which leads to several forms of collaboration. The purpose of this article is to present a brief overview of the uses of weblogs as tools for research e-collaboration.

Defining the concept of “research e-collaboration” precisely is extremely difficult. Here we assume that members of a virtual community engage in research e-collaboration when they use e-collaborating technologies in order to share information and discuss issues which contribute to advancing knowledge in a specific area.

BACKGROUND

The term Weblog was coined by Jorn Barger in 1997 to refer to personal Web sites that offer frequently updated information, with commentary and links. Blood (2002) classifies blogs into two “styles”: the filter type, which includes links pointing to other sites and comment on the information on those sites, and the personal-journal type, with more emphasis on personal self-expressive writing. There are many other types of blogs described in the literature, defined on the basis of different criteria; for example, knowledge blogs (k-blog), community blogs, meta-blogs.

The capabilities of blogs make them helpful tools for communication between members of a community or organisation. Some types of weblogs have originated as an answer to the communicative needs of specific communities; for example, knowledge blogs, weblogs for personal knowledge publishing. Kelleher and Miller (2006) describe “knowledge blogs” as “the online equivalent of professional journals” used by authors to document new knowledge in their disciplines. A related concept is that of “personal knowledge publishing,” defined by Paquet (2002) as “an activity where a knowledge worker or researcher makes his observations, ideas, insights, interrogations, and reactions to others’ writing publicly in the form of a weblog.” Many corporate and academic blogs make use of capabilities that afford collaboration: they enable scholars to communicate with a wide community, fostering peer review and public discussion with researchers from different disciplines. These weblogs have a precedent in what
Academic Weblogs as Tools

Harnard (1990) terms “scholarly skywriting”: using multiple e-mail and topic threaded Web archives (e.g., electronic discussion) to post information that anybody can see and add their own comments to.

There are many types of academic blogs (blogs from journal editors, individual scholars’ blogs, research groups’ blogs, PhD blogs), each of them used for different purposes. For instance, while the main purpose of the weblogs implemented by universities is discussion, weblogs by PhD students are mainly used to comment on the day’s progress and on the process of PhD writing, and blogs from journal editors are usually filter blogs, which provide links to articles or which comment on news related to the journal topic.

The uses of weblogs in research have been discussed in several papers and blog posts (Aimeur, Brassard, & Paquet, 2003; Efimova, 2004; Efimova & de Moor, 2005; Farmer, 2003; Mortensen & Walker, 2002; Paquet, 2002). These researchers depict blogs as facilitating scientific enquiry in two ways: (1) they help to access and manage content, through features such as archives, RSS (an automated system that enables bloggers to syndicate their content to other blogs), searchable databases, post categories; and (2) they are tools for collaboration, through communication and network features. These features include hyperlinks, comments, trackbacks (records of the Web address of the blogs that have linked to a blog posting), RSS, or blogrolls (a list of blogs the author usually reads, and that, therefore, deal with similar topics). But the most important “ingredient” for collaboration is the bloggers’ perception of blogs as a means to point to, comment on, and circulate information and material from other blogs.

As a tool for collaborative research, blogs have several uses: (1) supporting community forming; (2) helping to find other competent people with relevant work; (3) facilitating connections between researchers: blogs make it easier for researchers to develop, maintain and activate connections with others; (4) making it possible to obtain speedy feedback on ideas; (5) fostering diversity and allowing for radical new ideas to be acknowledged, circulated and discussed; (6) fostering communication and collaboration between researchers from different fields; (7) supporting the initiation and development of conversations. In weblogs, ideas can be generated and developed through discussion with others.

E-COLLABORATING THROUGH ACADEMIC WEBLOGS

We used a corpus of 100 academic English-language weblogs, collected between January and March, 2006, in order to analyse how they are used as tools for e-collaboration and how the elements of weblogs contribute to this purpose. Many academic weblogs are not intended as collaborative tools and thus do not include social software. In other cases, although comments are allowed, interactivity is very limited, and the weblogs are not really used as conversation tools. Therefore, for the purpose of this research, we have selected only active weblogs that include and make use of the comment feature. Drawing on previous research on blog analysis (e.g., Herring et al., 2004) and on our initial inspection of the blogs of the corpus, we identified the functional properties that make interaction and collaboration possible (e.g., comments, links). Then, we analysed the function of the 15 most recent entries in each blog (e.g., ask for feedback), the function of the comments to these entries (e.g., disagree with a post), and the types of links included in the postings and comments (e.g., to other blogs, to news sites, to Web sites by others, to the blogger’s own site).

The analysis showed that academic weblogs can be used to support the following forms of collaboration (or collaboration stages):

1. **Finding like-minded peers and establishing contact and collaboration with them, thus helping to create a virtual community of people interested in the same topic.**

Weblogs share features of personal and public genres. As personal genres, they are used by researchers to keep records of their thoughts, ideas or impressions while carrying out research activities. They also have an open nature, since anybody can access and comment on the author’s notes, and they are in fact intended to be read. By revealing the research a researcher is currently involved in and, at the same time, providing tools for immediate feedback on that research, weblogs facilitate collaboration. In addition, since weblogs are open to the public, not restricted to peers working in the same field, they facilitate contact among scholars from different disciplines and invite interdisciplinary knowledge construction (Aimeur et al., 2003).

Blogrolling lists enable readers of a weblog to find peers with relevant work. These lists do not only point