Instructional Use of Weblogs

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"The best thing about Web 2.0 is that… nobody knows what the hell it really means. Even the ones who coined the term are still struggling to find a compact definition. And this is the true beauty and power of Web 2.0—it makes people think." -Kathy Sierra

ABSTRACT

Web 2.0 can provide learners with increased interaction and online collaboration. Among its applications, weblogs have gained an increasing popularity as they allow bloggers to voice their own perspectives which can be delivered to a large audience through the Web.

Weblogs can be integrated into teaching-learning process as they encourage learners to collaborate and freely voice their ideas.

However, innovative technologies might not always lead to innovative distance education practices if timely adaptation lags behind. This study presents a review on instructional use of weblogs along with implications for open and distance learning.

BACKGROUND

Learning can be defined as persisting changes in performance which occur as a result of the learner's experience and interaction with the world (Driscoll, 2000). The success of this process primarily depends on learners' capability to reflect on their own experiences (Schön, 1983).

This self-regulated learning is mediated by the community in which individuals live through voices, views, papers, rules and all other cultural artifacts (Baggetun & Wasson, 2006). Thus, practitioners are always looking for innovative ways to improve learners' communicative skills in this mediating community.

Nourishing learners' communicative skills become more complicated particularly when learners are studying online since it is a real challenge to replicate communicative characteristics of face-to-face learning in online learning endeavors. Nevertheless, engaging in formal and informal communication, sharing and reflecting on experiences has been facilitated through innovative Web 2.0 applications.

Web 2.0 and Weblogs: What is new?
Web 2.0 refers to second generation web services emphasizing online collaboration and sharing among web users. These services provide a perceived transition from static and isolated information chunks to a self-generated and open communication where the authority is decentralized through allowing end-users to use the web space as a conversation field.

One of the most popular and increasingly growing features of Web 2.0 is Weblogs. Weblogs, or blogs are 'amateur websites that provide news, information and, above all, opinions to rapidly growing and devoted audiences drawn by nothing more than a shared interest or two and the sheer magnetism of the editor's personality' (Grossman, 2004, p.65). Blog can also be defined as a webpage on which authors publish their thoughts with the intention of starting a conversation (Wijnia, 2004).

In short, blogs are Web diaries (White, 2003). Blogging enables individuals to publish their thoughts on the web in a diary format without a need for programming or HTML knowledge. According to Farmer (2004), weblogs allow users to:

> ➢ **frequently update their blogs through simple web-publishing technology**
> ➢ **publish items by time and date of publishing**
> ➢ **attach to items the facility for comments to be added and for postings elsewhere that have linked to that item to be tracked back**
> ➢ **publish with each new posting a web feed such as RSS or Atom**

Probably because of the personal facility they provide, there has been a considerable expansion in the use of weblogs. Besides, technologies like weblogs are regarded as helping students find authentic audiences for their work (Richardson, 2006).

Anatomy of Weblogs

Lankshear and Knobel (2003) describe the anatomy of blogs bearing in mind that there is no hard rules for what a weblog should look like. Weblogs are usually divided into at least two columns one including each posting ordered and achieved chronologically while the other acting as an index of hyperlinks which indicate the blogger's favorite or recommended websites.
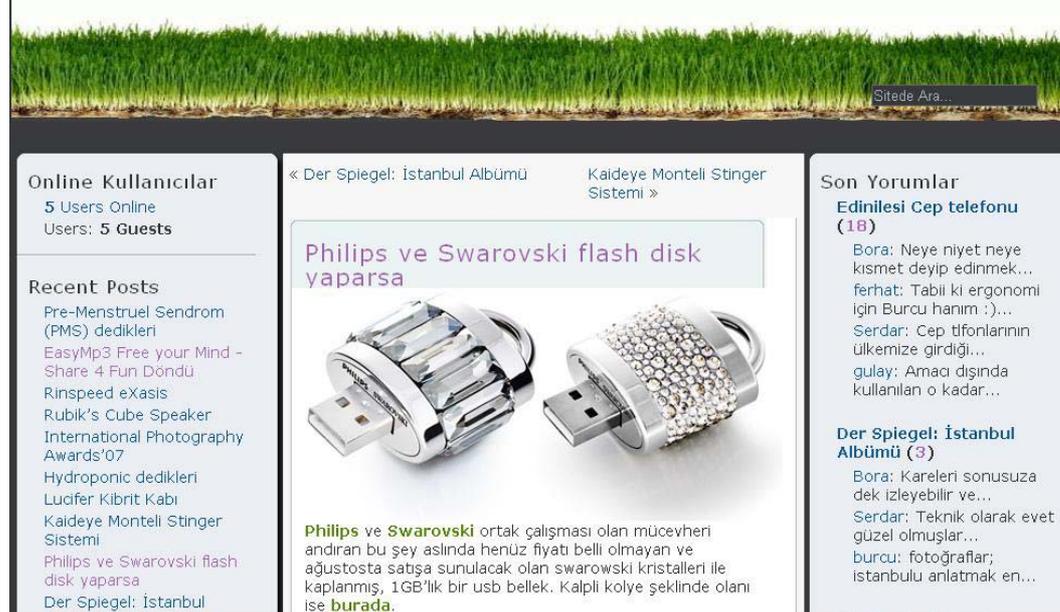
Figure: 1
Typical weblog layout

There are also additional features that could be used based on users' weblog familiarity such as banner titles, title taglines, calendar, last-updated counter, hyperlinks to monetary donation web services, photo of the blogger, and links to blogger's other works. The study further provides a comprehensive typology of

weblogs and list examples of educational and social practices that could be mediated by blogging. Figure: 1 provides a sample weblog layout.

Social Interaction and Verbal Immediacy
Blogs offer a different way to communicate than traditional web pages. They not only transmit information to audience as traditional web pages, but also allow the audience to comment on the content. This interaction carries utmost importance for online learning endeavors. Interaction refers to reciprocal events that require at least two objects and two actions which mutually influence one another (Wagner, 1994).

Even though the instructors and learners are physically separated in online learning settings, three types of interaction proposed by Moore (1989) (i.e. learner-content, learner-instructor, and learner-learner interaction) still continue to some extent. Blogs might not guarantee optimum interaction on all these aspects; however, if they are integrated into the online learning curriculum along with other instructional tools, they could serve as reliable interactive means.

Interaction is not sufficient to sustain the desired social dynamic on its own in online classrooms (Woods & Baker, 2004). In this respect, immediacy contributes to promoting learner interaction. Immediacy refers to communication behaviors which reduce the perceived distance among individuals (Thweatt & McCroskey, 1996). More specifically, immediacy is the sense of psychological closeness created through verbal and non-verbal means. Facial expressions, eye contact, posture and proximity might be considered as means of non-verbal immediacy whereas verbal immediacy might refer to psychological closeness created through word selection (Woods & Baker, 2004). Individuals are likely to engage in close distance communication to the extent that they are immediate, friendly and warm (Anderson, 1979). One should bear in mind that immediacy is a consequence of interaction as well as a contributor to it. Thus, inefficient interaction might lead to non-immediate results as well (Woods & Baker, 2004). Bearing the features of interaction and immediacy in mind while using weblogs for educational purposes, it is crucial for practitioners to create a learning atmosphere where student interaction and immediacy are promoted.

Educational Use of Weblogs: Edublogs
Weblogs are used in a variety of ways ranging from personal and family blogs to blogs used in the business world. The current piece of work will basically focus on the educational use of blogs, which are dubbed edublogs by Ray (2006). Therefore, blogs will be considered as either sources of information on relevant topics, or as modes of online classroom interaction in the current review (Oravec, 2002). Oravec (2002) reflects on the potential of blogs for promoting learning. In the Oravec study, weblogs are considered as unique tools in developing students' voices. More specifically, 'students can define their positions in the context of others' writings as well as outline their own perspectives on particular issues' (p. 618).

Thus, students can acquire a personal identity along with a sense of empowerment through trying to interact with others in relevant contexts. It is also maintained that weblog construction can help students become more critical and analytical. Finally, it is implied that weblogs can help in preventing information overload since they are effective tools of accessing relevant resources.

Schroeder (2003) examines the use of blogging to disseminate the information to faculty members at a specific higher education institution. He supports his claims through a case study conducted at The University of Illinois at Springfield. Inferences of the Schroeder study relevant for the current examination are that blogs -along with some other Web 2.0 technologies- provide a model for communication that can accommodate with hectic lifestyles of academicians at higher education institutions.

Blogs further provide means of identifying key news and research regularly. Moreover, the archive function of blogs enables practitioners to search for relevant titles and brief summaries. Thus, as archives grow, they serve as effective means to track changing technologies and viewpoints in online learning.

Williams and Jacobs (2004) investigate the potential of weblogs for higher education students. After reviewing refereed published materials on blogging and exploring educational blogging methods at specific higher education institutions, they maintain that blogging has the potential to be a transformational technology for education. One of the interesting finding elicited through an online questionnaire is that graduate students preferred not to participate in blogs mostly because they considered the available marks not worth the effort or they were not sure whether they had anything valuable to contribute.

The first reason might be compensated by making blog participation a significant part of the course grade while the second one might be compensated by sustaining high interaction and immediacy to increase learners' self-confidence. Only 12 percent of students disagreed or strongly disagreed with the assumption that blogging assist with their learning. More specifically, most students believed that blogging facilitated their learning. Majority of participants believed that blogging increased the level of meaningful intellectual exchange.

They further maintained that blogging should be used in their curriculum as a learning and assessment tool. Finally, they reported that they would participate in similar blogging activities for formative purposes as well. Both quantitative and qualitative findings reveal that graduate students participated in the blogging activity are in favor of using blogs to aid teaching and learning.

Quible (2005) lists advantages of using educational blogs in writing classrooms. She maintains that students have the opportunity to become familiar with an Internet application which has powerful communication capacities. Information is made available to students more readily and easily through blogs than giving students hard-copies of the same material, which is an economical instructional solution as well.

Ray (2006) suggests that blogs can be used in education as communication means, instructional resources, collaborative tools and showcases for student works. Weblogs can be used as effective communication means which serve more competently in disseminating information than traditional hard copy announcements. When they are used as instructional resources, they reduce the hurdles of dealing with hard copies since teachers can post assignments, course materials, explanations and tips regarding assignments, and comments while learners can share their comments and problems. Blogs can be used as collaborative tools as well, since they allow students to work together on projects. Students may even collaborate with students and teachers from other schools, cities or countries. Finally, blogs can serve as showcases for student works. It is possible to embed audio and video files into weblogs in addition to textual information as well, which makes showcases even better.

Lin et al. (2006) implemented a blog system in an international distance course between Japan and Taiwan. The blog aimed to empower reflective learning and communication. Thirty one students participated in the blog activity creating over 700 entries during the semester. Students preferred blog over the learning management system they were exposed to. Besides, blogs motivated students to generate reflective conversations, which led to a decentralized ownership in the end. Du and Wagner (2007) empirically examined whether the continuous use of weblogs as online learning logs would affect learning performance within the context of university senior level business education. Their hypothesis was that proper use of

weblogs could promote both cognitive and social knowledge construction. Findings from 31 undergraduate students enrolled in an information systems course revealed that a student's weblog performance was a significant predictor of the learning outcome while traditional coursework was not. The study implies that weblogs can be used as a social learning medium along with a knowledge construction tool.

The Downside

Even though blogs have an indispensable educational potential, practitioners should be aware of the downside as well. Ray (2006) lists accessibility and student safety as the downsides of blogs. Accessibility constitutes a big problem since students do not have equal opportunities regarding a computer system and Internet access. Safety is another problem. Blogs use should be integrated into the curriculum in a way that constant guidance and supervision are provided to children in order to protect them from online predators and harassment. Thus, specific personal information of students should not be published through blogs.

Hernández-Ramos (2004) investigated the use of weblogs and online discussion forums in a teacher training program. He aimed to expose students to reflective practice along with computer-supported communication and collaboration. Blogs and online discussions were used as vehicles for student reflection in an undergraduate course named Instructional Technology for Teachers. Fifty-six students were asked to create a blog on the subject of teaching, learning and technology. A rubric asking for both blogging and online discussion outcomes was prepared and applied.

Ninety-five percent of students were able to prepare their own blogs at the end of the semester while the majority of students meeting the requirements mentioned in the rubric. Findings revealed that students had problems considering themselves as active creator of knowledge. Besides, the conversations created exceeded the limits of intrapersonal and dyadic conversations addressing a larger and unanticipated audience. These perceived downsides were reflected on students' reported reluctance to incorporate blogs in their future teaching endeavors. In other words, participants failed to see how to integrate blogs into their teaching in a meaningful way. Even though blogging helped some shy students present themselves, it is considered necessary to identify and support students with insufficient writing skills, less analytical skills development or meager motivation to tackle with challenging tasks.

Divitini, Haugaløkken and Morken (2005) reported on their experience of using a blog to support communication and reflection. They describe the experience as a fiasco since they were not able to support communication and foster experience sharing. Despite the potential usefulness of the system, only six of 31 students created any content. Students either reported that they did not feel the need for the blog or mentioned the lack of time as an excuse for not blogging. Some students considered the university LMS as an obstacle. More specifically, they mentioned that it already took some time to get used to the LMS which left no time to get used to a new system. Some students mentioned technical problems or the lack of Internet connection.

In short, the experience was a real fiasco. Authors believed that technical problems were not enough to justify the fiasco. Thus they started reflection on action and mentioned several precautions.

First, chronological order of blog did not meet the structural and organizational needs of participants. In other words, learners were not able to rearrange their notes in a flexible way. Thus, entries seemed mostly unstructured. Second, uncontrolled accessibility might have limited students' freedom to express their thoughts. Third, students were not supported to view the content of the system while they were mobile. More specifically, requirements of student mobility were not met. Fourth, the system was not appropriate to allow users to open or close their blogs to other groups and individuals.

That is, underlying social structures were not accounted for thoroughly. Fifth, the objectives of the system were not well-structured or well-introduced to the students. Sixth, transferring from being a passive reader to an active constructor of knowledge required some time which was not provided to participants. Seventh, perspectives and expectations of teachers and students were not aligned. The activity was aimed to promote sharing but evaluation was realized on an individual basis.

Finally, the tools should have been introduced in an environment where they have a chance to develop. In other words, contextual analysis should have gone along with the needs of the individuals.

CONCLUSION AND IMPLICATIONS FOR INSTRUCTION THROUGH WEBLOGS

Innovative facilities provided by online education including Web 2.0 tools might offer better opportunities for interaction and immediacy if they are used in an educated way. Effectiveness of weblogs should be examined through longitudinal studies and action research. However, constant changes in blog technology make it hard to conduct longitudinal studies which might be out of date when completed. After reviewing several internationally refereed publications including above studies, we would like to offer the following implications regarding the effective use of weblogs for instructional purposes:

> Practitioners should make proper use of unique facilities provided by Web 2.0 applications. Thus, offering course materials and activities through weblogs should not be realized as verbatim replications of face-to-face classroom activities.

> Farmer (2004) maintains that weblogs are somewhat insufficient in their ability to empower the teacher to design and direct cognitive and social processes to reach desired learning outcomes. Thus, effective use of weblogs by instructors carries utmost importance since it places teachers to the centre of the activities as a guide who – as a facilitator and leader – will be followed by learners.

> Use of group projects, maintaining conversations on complex issues and allotting more time and grade on discussions might lead to increased interaction (Woods & Baker, 2004). Thus, these applications should be arranged with caution for effective application of weblogs in online classrooms.

> Non-verbal immediacy is not realized in blogging. Thus, verbal immediacy behaviors should be applied pertinently in online classrooms. Gorham (1988) lists some verbal immediacy behaviors. Among these behaviors, asking questions, using humor, addressing learners by name, initiating discussion and sharing personal examples with learners can sustain immediacy and create a sense of closeness among learners and instructors.

> As suggested by Hernández-Ramos (2004), the degree to which instructors participate in online discussions and blogging activities should be determined meticulously so that these tools can work as effective strategies to encourage students in active participation and collaboration.

> Clear criteria and strategies to get students into responding their peers' comments should be determined so that the conversations do not exceed the boundaries of anticipated interaction.

> Students with insufficient writing skills, analytical skills development or motivation to tackle with challenging tasks should be identified and supported.

> Educational institutions need to think through potential safety implications that accompany widespread publishing of student created content (Richardson, 2005). Besides, teachers need to monitor student use of blogs and help them use the tools safely.

> ➢ A recent study indicated that bloggers judge blogs more credible and informative than traditional mass communication tools (Johnson & Kaye, 2004). This is because the more one uses a medium; the more credible one judges it. Such a situation might require monitoring students blog contents regularly so that the contents do not misdirect further learning endeavors.

FUTURE RESEARCH DIRECTIONS

Both synchronous and asynchronous communication tools were somewhat available before the advent of Web 2.0. Thus, research endeavors regarding web 2.0 applications should particularly focus on new and specific tools provided by web 2.0 itself rather than previously available technological facilities. Such an attitude will provide more pertinent insights and implications regarding the potential contribution of unique web 2.0 tools to instructional practices.

As mentioned before, conducting longitudinal studies is relatively difficult since new applications and tools come on the market constantly, which makes some of the previous tools outdated.

However, this should not be considered as a disadvantage. Technology developments regarding web are kind of additive, that is, new features are added to current familiar technologies. Therefore, studying on the effectiveness of these unique features will facilitate conducting research with new applications as well.

Since instructors, as guides and facilitators, are located at the centre of the interactive activities provided by Web 2.0 tools, professional development of teachers regarding open and distance education carries utmost importance. Teachers need to design and direct cognitive and social processes during these innovative interactive activities.

Besides, they need to adapt and apply effective interaction and immediacy practices to lead to better learning outcomes.

Finally, they need to identify and assist students with insufficient writing skills, meager motivation or little confidence to deliver their thoughts. Such significant instructor responsibilities should lead researchers to investigate instructors' change readiness regarding online education practices. The degree to which instructors participate in online discussions affect the quality and productivity of weblogs used for instructional endeavors. However, there are very few studies scrutinizing on the nature and degree of interaction patterns occurring in weblogs.

Applying the implications of the massive research body on learner-instructor, learner-learner, learner-content and learner context interaction to online learning practices might be a solution at the inception.

However, nature of unique interaction patterns provided by weblogs should be further investigated in a way that a grounded inventory of pertinent and disadvantageous patterns for learning outcomes are generated.

Under normal circumstances, bloggers have no control on the nature of their audiences. In addition, blog readers are somewhat unprotected regarding the content quality of blogs. Along with the legal issues and social norms regarding the processing of weblogs, learners' sense of privacy and liability should be well-documented. Fortunately, there has been preliminary research on the issue of liability and privacy which documented bloggers' subjective perceptions of liability and privacy (Viégas, 2006). Investigating liability and privacy issues across different levels of bloggers and across different fields might lead to rather insightful implications for future instructional endeavors regarding weblogs.

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