WEBLOG FOR TEACHERS AND STUDENTS

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Abstract
Educators are always looking for interesting and innovative ways in which to improve the communications skills of their students and in communicating with their students. This is even more important when the students are studying online. Weblogs, originally a simple web browser based system for updating websites, have developed into powerful web based content management systems, capable of acting as a platform for learning that can accelerate the development of expertise learner behaviour. There is a trend to utilize the benefits of the e-learning as a mechanism to improve learning performance of campus-based students. Whilst traditional methods, such as face-to-face lectures, tutorials, and mentoring, remain dominant in the educational sector, universities are investing heavily in learning technologies, to facilitate improvements with respect to the quality of learning. This study explores into the role of weblogs in supporting teachers during their teaching practice and the key factors determining their engagement with weblogs. Underlying our study is an integrative approach that puts weblogs alongside with other popular media in use. An online community was intentionally built with weblogs to facilitate reflection and social interaction among dispersed teachers. In parallel, multiple channels of communication were employed for peer interaction of students. Weblogs were perceived as valuable in relieving isolation, documenting their experience, and expressing their personal feelings. This study sustains our conviction that the integrative approach is vital to have a comprehensive picture of interaction among a community. Our study deepens the insights into the distinct benefit of weblogs as educational media and informs the future development of an online community with weblogs. Weblogs provide a chance for students to experience writing in a public space where their work can have real value both for their classmates and for a wider community. This prepares students for a networked world where communication is essential and often social and where writing can have consequences.

Keywords: weblog, social networking, e-portfolio, learning community, blogging,

1. INTRODUCTION

The name 'weblog' derives from the medium in which they emerged – the conjunction of the words web and log. Weblogs are in their most simple form, online journals; websites displaying a chronological structure of 'posts', which adhere to a diary like structure. In the late 1990's weblogs appeared in increasing number, due to the fact that several companies and individuals had released easy to use, web-based software tools to create weblogs (Blood R, 2000). In subsequent years, weblogs have arguably reached a 'tipping point' where estimates (as of February 2002) put the number of active weblogs at 500,000 (Manjo F, 2002). Weblogs have moved from being simplistic online journals to become complex content management systems, offering meta-linking, collaborative tools and other educational features.

To gain an understanding of how weblogs can act as a learning resource, it is useful to look at some of the technical and social features that represent commonality between the different implementations of weblog software. A weblog is a frequently updated website, organised in a diary form with individual chronologically ordered entries or posts. Due to the high quality of the underlying technology, this has been incredibly popular, and many internet users are familiar with some form of weblogging.

Perhaps the most obvious feature of a weblog is the style of the writing and it's hyperlinked, pithy structure. This style of writing is a crucial element of weblogs, and one that has benefits and drawbacks for the weblog as a learning tool. On the one hand, the short entries, commentaries and intra-linking help develop a sense of identity and allow for quick retrieval of information. Conversely, this style of writing rarely enables deep, reflective thought and commentary. This is not a limitation of the weblog software however, but a cultural norm of weblogs, a norm that is changing as weblogs start to be used professionally by journalists, educators and writers. A significant factor contributing to the use of weblogs is their ease of use. Typical weblog software is presented through a web-browser, which exhibits a simple interface for the inclusion of text and urls. Users are able to quickly capture notes from internet websites by highlighting relevant text and clicking a link in a web browser. Features such as automatic text highlighting and straightforward 'one-click' posting to a user's own weblog add to the weblog software's increased utility. The final trait shared by all weblog software is the 'date-stamping'

and automatic archival of posts. This archiving allows for searching and permanent links to entries – a factor that increases a weblog's utility as a tool for personal knowledge management (Doctorow, C 2002).

As a light-weight, cost-efficient and flexible Internet medium, blog attracts growing interests and attention among teachers and students. There is a small yet growing body of empirical studies on the use of weblogs in various learning environments (Martindale & Wiley, 2005). Both theoretical validation and empirical evidence on the educational benefits of weblogs have begun to accumulate.

The main objective of our study is to identify the role of weblogs in supporting a learning community among teachers and students. An integrative approach is taken by examining weblogs. Through identifying the niche of blogs as an educational medium, we can make a big step towards the optimal combination of various tools to serve diverse learning needs. In this study, our inquiry is guided by the following questions: (1) what distinct role can weblogs serve for teachers and students during their teaching and learning practices? (2) What are the key factors that influence teachers and students' participation in the blog-supported learning community? The aim of this study is to deepen our understanding of the distinct affordance of weblogs in the context of distance learning. Meanwhile, we can glean valuable insights into how a group of teachers and students use various media to maintain social interaction and learn together.

2. LITERATURE REVIEW

Blogs in Distance Learning

The unique benefit of weblogs is the combination of both self-expression and social interactions (Richardson, 2006). In another word, weblogs are both individualistic and collaborative (Huffaker, 2004). Among others, the most apparent benefit of blogging in supporting teaching and learning might be the opportunities it affords for self-expression and self-reflection (Brescia & Miller, 2006; Ferdig & Trammell, 2004). As a self-publishing tool, blogging enables and facilitates multi-modality expression. In addition to text, bloggers can post pictures, audio or even video files (Farmer, 2004). Unlike online discussion forum shared by many, blogs are more individual-centered. Bloggers have full control over content, means of representation (Ferdig & Trammell, 2004) and whom to share with. In addition to its affordance for self-expression, weblogs can also promote social interaction. Unlike private journals, blogs can be socially reflective medium (Farmer, 2004). Social interactivity is enabled through commenting and linking to other websites or weblogs. Journal writing has been used extensively in enhancing reflection in traditional classrooms. However, weblogs could transform the process and outcome of reflection (Sevelj, 2006) with its reach at global scale and accessibility at anywhere and anytime. In this way, weblogs offer ample opportunities for users to project themselves socially and emotionally (Farmer, 2004).

The empirical studies on the educational use of weblogs are quite limited. Williams and Jacobs (2004) observed that the educational application of weblogs concentrated in the area of teacher education, journalism and library. Stiler and Philleo (2003) explored into the use of blog in pre-service education and noted that the depth and breadth of student reflectivity were positively affected through blogging. Dickey (2004) reported that blogs helped students in distance learning courses overcame the sense of isolation through enabling expression of feelings and exchange of support. In our study, we also aimed to use weblogs to strengthen connection among teachers and students and involve them in reflection on their teaching and learning practice.

E-learning

The Internet has brought about drastic change in the educational realm. E-learning becomes an important trend in schools world-wide. Blended learning becomes the most pervasive type of E-learning (Harrington, Gordon, & Schibik, 2004). The blended learning is based on three fundamental premises: 1) face-to-face (F2F) interaction might not always be rich, deep and inherently superior (Baym, Zhang, & Lin, 2004); 2) the relationship between the technology-supported and F2F interaction is supplementary (Osguthorpe & Graham, 2003); 3) the thoughtful integration of various media can provide richer learning experience through supporting diverse learning needs and styles (Harrington et al., 2004). According to Driscoll (2002), blended learning might mean different things for different people. In our study, we centered on the mixture of various media in support of a learning community when it was temporarily dispersed. Meanwhile, many researchers (e.g. Haythornthwaite, Kazmer, & Robins, 2000) advocated providing multiple means of communication - asynchronous and synchronous, traditional or web-based, to support various communication needs. The newly emergent media don't replace old media, but add in the pool of
communication tools at our disposal. As a result, our ways of communication become much more dynamic and complicated. This poses great challenges for teachers to integrate and blend various media for diverse learning objectives, contexts and audience.

3. FINDINGS
The Benefits of Weblog for Teachers

Collaborative learning

Encouraging self and peer assessment is a critical part of any learning environment (Gagne R, 1988, Hollingworth R, McLoughlin C, 2001, Yang H, 2001). While this requires the teacher to develop a culture of non-punitive assessment from peers and the individual learner, the logistics of this additional learning process are significantly simplified when work is presented through a weblog. The 'add a comment' feature of weblog entries enables the author and peers within a learning community to develop annotated, indexed material with the inclusion of commentary and reflection:

Examining expertise

The objective of this section is to examine in detail the aspects of the educational process that contribute and lead to expertise. In doing so, elements of weblog functionality will be re-introduced and examined to discover if they can contribute and accelerate the development of expertise. In order to properly assess the development of expertise, one must first define what expertise actually is. By developing a meaningful understanding and definition of expertise, examination of the way in which these skills develop becomes more useful. One of the main demonstrable traits of expertise is the ability to conceptualise and structure knowledge in meaningful and usable ways (Bransford J, Brown A, Cocking R, et al, 2000). Experts develop sophisticated conceptual models based on their current understandings and manage new and existing information in a structured way.

Bransford et al argue that the additional ability of experts to recall 'usable' information lies in the fact that experts have conditionalised their knowledge in ways that represent some form of context. This conditional knowledge is only used when the expert sees it as having relevance (Bransford J, Brown A, Cocking R, et al, 2000). If this knowledge is conditional, then by definition, this knowledge is in fact, changeable; new information can affect the context and relationships of existing information. Experts should be able to quickly adapt and add new context and develop new conceptual models and relationships, upon the introduction of new knowledge and the development of new skills. We may also categorise the utility of information itself as playing a role in the demonstration of expertise. Information, in and of itself, has no utility to an expert or a novice. It is only when information has, or is given, context, or is deemed relevant, or perhaps associated in some way with other pieces of information, that it becomes 'useful'. This is an important classification, because we can develop this idea further by stating that if pieces of information can in some way be assigned and retain this meta information (context, relationships with other data), they gain utility – even if they are used by someone else, or somewhere else, perhaps by a non-expert.

Learning expertise

As the definitions of expertise have been examined, assessment of the ways in which learners develop that expertise is now possible. The dominant theme that emerged in the definition of expertise was self-motivated assessment and cognition. It follows then, that examination of the learning that leads toward expertise should focus on theories of self-directed learning. In examining these selected learning strategies, We will attempt to identify the areas in which weblogs can potentially assist and accelerate the learning and development process.

Self-directed learning

One learning technique that contributes toward expertise is that of self-directed learning (Gagne R, 1988, LeFrancois G, 1997, Hollingworth R, McLoughlin C, 2001). Put simply, self-directed learning consists of educational strategies and techniques that allow a learner to create their own learning, conceptual models and relevancies. Perhaps the core educational model that is related to self-directed learning is that of metacognition; the ability of learners to understand their own educational process and development. Metacognitive theory examines the ways in which learners acquire, organise, modify and recall information (LeFrancois G, 1997).

The opportunity for weblogs to accelerate and enhance the development of expertise at the semantic encoding stage of learning is clear. The act of blogging, in itself, provides an immediate and repeatable process for cognitive assessment and assignment of meaning to material. Secondly, weblogs assist the learner by storing information automatically in a database, enabling easy retrieval. One could argue that the learner still needs to recall the information to search for it, but the learner need only semantically encode a small piece of metadata, and use the weblog to retrieve the actual, larger piece of information. Finally, the information itself can be semantically encoded with metadata when entered into the weblog. This data can then be used automatically to become part of a wider collection of linked, structured information that can be accessed by not only the original weblogger, but also other novices, who immediately benefit from this automatic, collected expertise.

It is possible for weblogs to facilitate these learning strategies. As we have seen in the section outlining collaborative learning, weblogs have a built-in mechanism for commenting on posts. If learners use weblogs to post examples of their work, then the 'social interactions' facilitating reflection can be made through the medium of the weblog. Because of the non-synchronous nature of weblogs, social interaction can happen in a dispersed, time independent way and commentary is recorded within the context of the original work, adding to the conceptual models of all involved. In this way, weblogs can be seen to support the process of reflection. Also, this newly developed information can be utilised as a resource. It should be noted that web based discussions do not offer the same level of nuance as personal, face-to-face conversations and therefore it would be advisable to use the weblog as a medium for continuing conversations and reflections between students 'offline'.

The second strategy for reflective thinking is useful to note, but has more to offer in an examination of learning material design. The third strategy for reflection could be significantly enhanced by the use of weblogs. Both the categorisation, intra-post searching and comments features of weblogs offer scope for the learner to organise, monitor and evaluate. Perhaps the key element for reflection offered by weblogs is the act of writing itself. This process requires utilising the cognitive disciplines previously outlined and weblogs also enhance the learner's contribution with the features previously discussed such as automatic archiving and user selected categorisation. Because the process of reflection, organisation, categorisation and recall is utilised as part of the single act of writing a post to a weblog, weblogs can be said to accelerate the process of reflection. Again, it must be noted that the cultural norms of writing weblogs need to be understood and learners encouraged to write without the constraint exhibited by typical novice webloggers.

Community based learning

Community based learning encompasses many of the learning functions of peer review and assessment already discussed and therefore is useful to assess in terms of educational development toward expertise. Setting up communal projects where learners collaborate and share their learning is an effective way of developing the peer assessment and reflection that has already been seen to be a demonstrable part of expertise. These activities can include the class developing a portfolio of their collaborative work, collaborating on a group project and other activities. Weblogs again offer a significant educational benefit to the teacher, as weblogs can include multiple authors and by default, offer time and date stamping of posts, categorisation. Weblogs also allow for the collaborative assessment through their comment system that is so important to reflective learning. The social nature of weblogs, with the emphasis on sharing information, and commentating on existing posts also lends itself fully to the needs of community based learning.

The default behaviour of weblogs mean that the setting up of a learning community and critically, the management, capture and assessment of the resultant information, result in weblogs acting as a fast, effective tool for community learning. Due to the development toward expertise resultant from community based learning, weblogs are identified in this case as facilitating the acceleration of expertise.

The Benefits of Weblog for Student

There is a great deal of discussion involved in traditional courses, and this would need to be reflected in any electronic learning aid. The importance of linking together people, ideas and resources cannot be overestimated. Weblogs are a great reflective tool. A student can write something about their course, perhaps categorise it in terms of subject or the piece of work concerned, and that reflection can be accessed and searched by both date and context. However, weblog functionality comes into its own when mixed with social networking, as with LiveJournal: the student can then mark certain reflections as being for public consumption, or viewable by certain groups of other users. They can then make comments and perhaps add their thoughts in their own journals, with a link between the two established via a trackback. Students then have use of not just their own reflections, but those of their peers, and potentially teaching staff too: a much wider realm of thought, which might produce conclusions a student may not have arrived at on their own. A student could then, within a weblog post or portfolio page, provide a link to any object in their digital repository. Perhaps a trackback link could be made from that object to all the posts and pages mentioning it. This would allow a student or tutor to instantly see, when looking at a piece of work, the personal reflections and inter-student discussions relating to it. Furthermore, it can also affect learning in the "real world"; through a social networking enabled system, a student could find and communicate with a number of like-minded individuals, who might then organise study or social groups. If an establishment's system was linked to other systems in other parts of the country (or the world), groups of students doing similar courses could all compare notes and learn from each other.

Reasons for Blogging of Students

The leading reason for blogging was to keep in touch with their peers when they were dispersed in various schools during teaching practice. Documentation of their teaching practice experience and exchange of ideas with peers were also identified as the main drivers for blogging. For many students, blogs also provide a platform for sharing pictures. Meanwhile, they tended to participate under the social influence. Also the students saw blogging as a channel to relieve stress.

Barrier to Blogging

As to the barrier to blogging, lack of time was identified as the leading reason. Unanimously, our respondents felt great pressure of time while they served the dual role as both teacher and student. For more than half of the students, access to computers and comfortable level with the technology didn't pose as a problem. No one preferred to use other blogging services. It was also revealed that students preferred to use other media for social interaction among peers. The students also preferred to write in their own blog space.

4. CONCLUSION

The technical and social nature of weblogs enables them to be used in a number of useful ways. Perhaps most usefully, the simple act of posting to a weblog satisfies a number of educational criteria. The technical infrastructure of weblogs assists knowledge gathering with the creation of taxonomies and the automatic display of domain knowledge from other websites. Usefully, weblogs also accelerate the development of expertise by assisting expert behaviour such as inferring previously unseen relationships between information and facilitating the reflection nature of learning. Weblogs can also provide a pivotal role in collaborative learning, where their technical and social features can enable rapid and effective group pedagogical activity. Interestingly, weblogs can demonstrate, on a very simple level, emergent behaviour similar to that at the lower levels of attainment for students; inferring relationships between weblog entries and creating new relationships between information. This 'skill' however is completely dependent on learner input and the weblog remains, as it should, a useful learning resource that will assist and accelerate the motivated learner toward expertise. The proliferation of Internet-based media has opened up new opportunities for communication. It also poses challenges for teachers and studetns to choose appropriate media to support teaching and learning. We believe a better understanding of the distinct affordances of tools is vital to utilise and blend them meaningfully and effectively. The salient benefits of weblogs lie in their affordance for self expressions and connecting dispersed groups. However, online dialogue in blog space was not adequate mainly due to students' busy schedule. the distinct benefits of weblogs are identified as documentation of experience, self expressions and maintaining a sense of connection within a dispersed group. Yet, the busy life of students significantly impeded their engagement with blogging. Besides time pressure, students' preferences and perceived affordances of media affected their attitude and actual use of blogs to a large extent. We hope this study can serve as an opportunity to cultivate the habit of blogging among the teachers and students so that they can carry on with reflection and sharing with blogs.

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