ENHANCING LEARNING BEYOND THE CLASSROOM: BLOGGING AND OTHER SOCIAL NETWORKING

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Abstract

Blogging has become one of the key ingredients of the so-called socials networks. This phenomenon has indeed invaded the world of education. Connections between people, comments on each other posts, and assessment of innovation are usually interesting characteristics of blogs related to students and scholars. Blogs have become a kind of new form of authority, bringing about (divergent) discussions which lead to creation of knowledge.

The use of blogs as an innovative, educational tool is not at all new. However, their use in universities is not very widespread yet. Blogging for personal affairs is rather commonplace, but blogging for professional affairs – teaching, research and service, is scarce, despite the availability of ready-to-use, free tools. Unfortunately, Information Society has not reached yet enough some universities: not only are (student) blogs scarcely used as an educational tool, but it is quite rare to find a blog written by University professors.

The Institute of Computational Chemistry of the University of Girona and the Department of Chemistry of the Universitat Autònoma de Barcelona has joined forces to create "InnoCiència", a new Group on Digital Science Communication. This group, formed by ca. ten researchers, has promoted the use of blogs, twitters. wikis and other tools of Web 2.0 in activities in Catalonia concerning the dissemination of Science, like Science Week, Open Day or Researchers' Night. Likewise, its members promote use of social networking tools in chemistry- and communication-related courses.

This communication explains the outcome of social-network experiences with teaching undergraduate students and organizing research communication events. We provide live, hands-on examples and interactive ground to show how blogs and twitters can be used to enhance the yield of teaching and research.

Impact of blogging and other social networking tools on the outcome of the learning process is very depending on the target audience and the environmental conditions. A few examples are provided and some proposals to use these techniques efficiently to help students are hinted.

Introduction

Blogging has become one of the key ingredients of the so-called socials networks. This phenomenon has also invaded the world of education. Connections between people, comments on each other posts, and assessment of innovation are usually interesting characteristics of blogs related to students and scholars. Thus, blogs have become a kind of

new form of authority, bringing about (divergent) discussions which lead to creation of knowledge.

The use of blogs as an innovative, educational tool is not at all new. However, their use in universities is not very widespread yet. Blogging for personal affairs is rather commonplace, but blogging for professional affairs – teaching, research and service, is scarce, despite the availability of ready-to-use, free tools. Unfortunately, Information Society has not reached yet enough some universities: not only are (student) blogs scarcely used as an educational tool, but it is quite rare to find a blog written by University professors.

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This communication tries to provide an overview of the outcome of social-network experiences with teaching undergraduate students and organizing research communication events. Impact of blogging and other techniques is very depending on the target audience and the environmental conditions. Examples allow to hint for efficient use of social network utilities, in order to enhance the yield of teaching and research.

Blogs and twitters in the real world

It is becoming commonplace to use blogs and wikis among students and, despite the different opinions in this field, the results seem to be very positive. Sometimes it is the difficult to control the quality and relevance of the information in wikis. However, the idea of the benefit which can be obtained by its permanent development and never-ending editing is quite widespread. Emphasis is placed on the need of well-organized contents and good access to search engines in wikis and blogs. It is a common thought that using wikis and blogs in education is a way of building knowledge collectively. Likewise, some authors have pointed out the idea of a wiki as a space where one can learn not only concepts but also social behaviour - although there is not a general consensus yet. Furthermore, it seems that we have to start seeing an encyclopaedia like a dynamic form of knowledge and that, while wikis bring about a convergent discussion, blogs carry divergent discussion.

Using wikis and blogs in education brings a lot of advantages. In addition, it is an easy way of creating simple websites, so this fact allows students to spend more time concentrating on the content, and not focusing merely on the container. They let them establish a feedback, because they can add information and also they can correct or change it at any time. Using new technologies increases the attention of students, as they see them as something new, fruitful and entertaining. One must say also that they probably do not realize that at the same time they learn.

Having a blog or a wiki has become a tool which allows people to be a part of a community. It is sp because all blogs, indeed, are linked. Some teachers have included wikis and blogs as part of their classes. The students learn when they write, when they discuss about an aspect they see differently, or when they use their teacher's blog as a complement to the explanations.

Blogs have entered universities, too. Certainly, they are not widespread enough, because it is quite rare to find blogs written by university professors or undergraduates. Although some universities are trying to involve students in the blogging world, it seems still

to be an objective in the long-term. But the benefits of being a part of this world are starting to be a reality in the educational world.

Very recently, the newspaper El País carried a report on the difficulty of Universities to embrace Web 2.0 [1]: few universities and very few professors use blogs as an educative tool to promote criticism and enhance discussion, as opposed to American universities. The report comments also on using (scarcely) blogs in primary and secondary education.

Moreover, the same newspaper kind of predicted the end of the blog era because of the widespread use of social software like *Facebook* [2]. It also reported that monologues, rather than conversation, are characteristic of microblogging tools like *twitter*.

Maintaining a blog has some clear advantages. You can use it as a way of increasing knowledge by yourself. As a lot of points of view appear about a topic, you can use them to build up your own opinion about one aspect. It will help you to be a more critical person. You will learn how to identify the relevant and valid information. You will also learn how to organize information and you will increase your writing skills. It is easy to create one, so you can concentrate on the contents. In addition, it is free. You can bring together a lot of information about a particular subject. You will be a part of a community because all the blogs are, indeed, linked. It is a good tool to "learn how to learn". And last but not least, you will be able to see how your thoughts and opinions have evolved and changed during the months/years.

Short messaging through cell phones (SMS) has been more important than ever in 2007, especially among teenagers and students, even though many adults consider it as a kind of communication that allows one to tell something instantly with the confidence that the receiver will read it. People who has never used e-mail may be fluent in using short messages. A related tool using the Internet is sending short messages to a particular website called twitter (twitter.com). This website allows to send short messages over the Internet, so anyone having suitable access and privileges can see the group activity.

Our Group InnoCiència promoted the use of blogs and twitters in two special occasions: during the Researcher's Night (RN07) on 28/9/2007, in the heart of the Girona old city, and during Science Week (SW07), which took place for three days, 15 through 17/11/2007

Both in RN07 [3] and SW07 [4] our Group participated in the booth installed by the Institute of Computational Chemistry of the University of Girona. This Institute promotes Chemistry and Computational Modeling through a series of activities in collaboration with

the Department of Chemistry. of the same University.

Blogging was available through one of the readily blogging sites. Since it is used in other fields and our group has some experience on it, WordPress was used for blogging (http://wordpress.com). Starting a blog there is very easy.

In both cases a laptop was available in the corridor so visitors (both students and adults) could write posts into the activity blog we had created. The screen output was projected into the white panels of the booth, so it was very visible to visitors.

Likewise, the twitter had another laptop to write short entries. Only one multimedia projector was installed, so the two screens, that of the blog and that of the twitter, kept alternating.

In the picture, one can see the projection of the laptop screen onto the booth panel. Other centres of interest are quite close and are slightly distracting.

During both activities, the cellular network was also used: visitors and people at home who followed the twitter could send SMS (short messages) which were automatically forwarded to twitter. The procedure involved a server of the University of Girona, because sending SMS directly to Twitter.com was too expensive.

Our feeling about blogs and twitters

Our experience during these two activities involving public awareness of Science has provided us with mixed feelings. Even though the overall result is indeed positive, it is also clear that social networking is not a great thing to do in a Science exhibit. Participants and visitors have many other interesting things to do: playing games, attending magic performances, looking around… If one has not much time available, and there are 40 booths to visit, the amount of time to post a blog entry or send a twitter message is very scarce.

Furthermore, the intrinsic nature of Science Week or Researcher's Night, with lots of visitors, people, activities (e.g., gastronomical) and especially noise prevent a reasonable use of social networking tools.

Visitors in both cases did not pay much attention to our suggestion (SW07' blog can be seen in the above image). Of course, students already interested in computers or quite fluent in social networking, sometimes good bloggers, stopped by and posted an entry – or they even used their cell phone to send an SMS, perhaps just to try and be kind.

However, we did not find great interest into explaining and posting online what is most appealing to us: feelings and evaluation. Nor did we receive

feedback after visitors and students went back home. It is difficult to attract and motivate visitors to comment on what they have seen and to discuss ideas stated by other people. The reasons of this behaviour may be rooted in the ideas below.

Blogger John Walger has written recently his 10 top tips for new bloggers [5]. In his opinion, *a true weblog is a log of all the URLs you want to save or share*. Others [6] think of blogging as a way to yield ideas and to get ideas that yield themselves to further ideas. an idea to have ideas. With the new idea of lifelogging [7], according to Scott Carlson "*as they push into a future that is totally on the record, lifeloggers are also pondering and fretting over how this technology will alter society. What can lifelogging do for us? Could it improve scholarship? What are the legal risks? And how will lifelogging affect personal relationships, private conversations, and family histories*?" Lifeloggins seems the ultimate blog: record everything it happens to you, all the time, everywhere.

Moreover, tagging has emerged as a powerful idea related to blogging. In the interesting blog tagsonomy.com [8], it can be read that "*Is the growth of tagging disrupting any existing ecosystems? Specifically, has tagging seismically affected the established IT or information management realms, the two existing ecosystems currently seen as the most likely candidates for disruption by tagging?*". Tagging, which is related to social networking, has emerged as a powerful candidate to sort and order the superhighway, the Internet. Almost everything is nowadays tagged. The last version of Wordpress, for example, allows one to assign categories to posts, as usual, but now also allows to assign tags to posts, i.e., to *tag* them. Photo album software allow to tag pictures, while YouTube allows to tag videos,

The ideas contained in the above paragraphs do not marry well with an environment (noisy, entertainment, fancy, crowdy, …) like that of a RN07 and SW07. This may well be the reason of the rather low success of blogging proposals in the two activities reported here.

With regards to short messaging being recorded and transmitted to a public website, i.e., twitter.com, after an initial stage when it is fun, interest in this method of information decreased. This may be a tool which is not well understood yet or whose use may increase with time. However, short messages carry about a very limited amount of information. Members of the university environment (researchers, professors, staff, students (may find e-mail much more appropriate because it can contain much more information, can be kept forever and is easily searchable.

Academic blogging

Blogging in the classroom is increasing, when it is related to a specific course or subject. Blogging about teaching is not difficult to find, both at the high-school level and the university level. However, blogging about research or about the university is difficult to find. And blogging about the very activity of the professors and researchers is rare.

There is a good example on academic blogging, however, at the blogging server at the University of Sidney [9]. This website states that "*Blogs dot Usyd is intended for blogs that support University staff research & other projects. If you're a student, or looking for a personal blogging space, you should look for other blog providers like Blogger.com*."

Most of the time spent by researchers and staff at work is spent in professional, traditional activities. However, they do not use to communicate what they do, how they do, and they perform. Publicly-funded researchers might tell the university community about their daily experience, about their opinions on University daily life. The process of creation of knowledge is not at all straightforward, so probably web surfers would like to know how researchers proceed, besides knowing the outcome of their very investigations.

University of Sidney's approach is interesting because it asks researchers and staff to write about their experience at the university, gathering posts in a single, searchable website. This could also be done by means of taggins services like Technorati, but maintaining the group of websites dealing with a single University carries about a sense of collectivity and commutiy, in this case the University of Sidney.

One can envision a future where the quality of a University or research centre will be measured not only by the knowledge they create, but by the knowledge they actually communicate and disseminate to the public.

Public awareness is of utmost important in public universities. We will see in the forthcoming years a shift in the duty of researchers towards knowledge dissemination.

Conclusions

The use of blogs and other forms of Internet information services like twitter has been assessed. In a crowd, noisy environment like that of Science Week or Researcher's Night, students and visitors are not well attracted to comment on the activities they are visiting or have visited. In our opinion, blogging requires quiet thinking and thus available time. Time is scarce, and spending it for blogging must lead to benefits which exceed costs. Blogging at home is interesting and fun. Blogging in the classroom may be tougher. Blogging in a stand-up position like those in the two examples above is difficult.

The question appearing in the title may be answered now. Academic and student blogging is neither advantageous nor a drawback; on the contrary, it depends on the situation. Our two test cases did not perform well. In those cases, out blogging proposals were rather irrelevant. Blogging is a virtual process; blending it with real processes like those occurring in a typical high-school student-oriented is not yet positive enough. Academic blogging (by academics) is very rare nowadays. Further evaluation will be required in the future.

Blogs, wikis, twitters and other social networking tools are a hot topic in teaching/innovation meetings, e.g. INTED 2008 (València, march 2008) had a fair number of oral and poster communications dealing with this subject, provided by different groups around the world.

These features are likely to change with the new tools provided by big Internet-related companies like Google. For instance, Google Docs and Google Groups are introducing novel ways to foster collaboration and to work online and offline with the same tools. Blogs, wikis and chats are provided with simple interfaces, thus shortening the learning period to use such tools.

Twittering has some fans and some detractors. For instance, the Chronicle of Higher Education posted an interesting entry on several examples of using twitter in American universities [10]. However, the same journal mentioned that perhaps using twitters involves much too noise in our academic world. Whether they will succeed and be valuable or not, only time will tell.

Can blogs be used to evaluate and assess the performance of students? This is a current topic being studied. For instance, there is an ongoing Ph. D. thesis on this which has developed its own blog [11].

And can blogs be evaluated? One might say that the number of comments to an entry is quite equivalent to the number of references to a scientific article. Perhaps some day an Internet service will report automatically the impact of particular blogs; perhaps it will even discern between positive and negative comments.

Two of the authors maintain blogs [12]. Further, updated information on this subject can be found there.

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