

## Using web blogs as a tool to encourage pre-class reading, post-class reflections and collaboration in higher education

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**Abstract:** This paper reports on the students' experiments of using blogs to encourage themselves to do pre-class reading assignment and reflections after class. The sample in the study included five ESL (English as a Second Language) graduate students in a course of teaching methods, and 90 software engineering students in an undergraduate information technology program. Results indicated that there was a positive attitude towards the use of blogs for pre-class preparation and post-class reflections. However, considering the successful experience, it is important to consider the class size, students' educational level, and the type of reading assignment.

**Key word:** blogs; higher education; class discussion; collaboration; TESOL; ESL

### 1. Introduction

Class discussion is a vital element in higher education. However, for an effective discussion, students must do pre-class readings. This allows them to have a stand before class and enables them to engage in the discussion. To encourage students to do pre-class readings, teachers used blogs. Using blogs for courses, as an enhancement to the traditional class or online course, is becoming more and more popular. A blog is defined as, "A website in which the entries are made in journal style and displayed in a reverse chronological order" (Wikipedia, 2006). It is also defined as, "Personal web pages written in chronological diary form and maintained through blogging software" (Wagner, 2003). Visitors to the blog can read, comment and link to the blog postings. From an educational perspective, the availability and ease of the use of blogging software makes blog a practical tool for higher education.

This research aims to answer the following questions:

- (1) Does students' use of blogs encourage them to prepare for class and do pre-class readings?
- (2) Does students' use of blogs encourage them to reflect on class activities and post their reflections online?
- (3) Does it support collaboration with their peers?

The remainder of this paper is organized as follows. The authors will first review the literature on educational uses of blogs. Then, they will present their methodology in conducting this study. After that, the authors present the results of the study and the discussion of the findings. The final section summarizes the authors' work and draws some conclusions and future directions.

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## 2. Blogs in education

Blogs are potential technological tools of teaching and learning transformations according to the Australian scholars (Williams & Jacobs, 2004). One of the important aspects of blogs is that they are readily accessible and easy to use by teachers and students, only a computer and a link to the Internet are required. Blogs can play an essential role in both teaching and learning. Even though there is a shortage of published materials of blogs in education, it is considered as an interesting tool in which the students can document both the learning activities and results (Dempsey, et al., 2003). Blogs have unlimited advantages for helping the educational sector. However, the evaluation of blogs depends mainly on the followings: (1) the person writes the blog; (2) people read it; and (3) the goals and objectives of the blog.

For this study, the blog is written by an instructor commented by students, read by both students and the instructor, and designed for supporting students in preparing for the class discussion.

The literature (WANG, et al., 2008; Saeed, et al., 2008) reported on the usefulness of blogs in supporting collaboration among students. By using blogs, teachers can arrange a collaborative learning environment where students can peer edit and comment on other students' posting (Dieu, 2004; Mitchell, 2003). Students can see their work as well as other students' work and be able to collaborate on the learning activities.

Blogs have other benefits of blogs in education both for students and instructors:

- (1) Students that have no personal websites may interact with others using blogs or cyberspace community;
- (2) Students can also practice their writing skills on the web, and they will be careful if they know someone will comment on their work;
- (3) Blogs empower students to become more analytic as well as critical;
- (4) Students have the opportunity to write on the blog and document their work. Documenting saves the work during the course period and reflects their developments;
- (5) Students can discuss with the others on the course topics and reflect their views with others on the blog;
- (6) Students are able to link their blogs to other resources of learning to gain knowledge. They may link their blog to other blogs or any other related media to the subject;
- (7) Students can converse and discuss with their teachers;
- (8) Instructors can provide course details on the blog;
- (9) Instructors can review and check students' work;
- (10) Students have an opportunity to collaborate and interact with the wider community of students and teachers on the Web;
- (11) When used for warm-up activities, blogs help instructors guide the classroom activities, as teachers can adjust and the organization and content in accordance with the students' current knowledge (JUANG, 2008);
- (12) Blogs enable the students to learn construction of social and cognitive knowledge (Wagner & DU, 2005);
- (13) Blogs support class interaction (CHANG, et al., 2008) and discussions as well as enhance class presentations;
- (14) Blogs use an automatic dating system which helps tracks assignment submission. This dating system helps in searching and locating postings on a certain date.

### 3. Blogs in language learning

Using blogs helps students in navigating the English websites (Campell, 2004), which increases their English language knowledge by chatting and interacting with other bloggers, students or even teachers, and makes them be able to read more articles online which builds their language capabilities.

WU (2005) highlighted the effectiveness of using blogs in English writing as EFL (English as a Foreign Language). In WU's report, he stated that students are posting more than eight articles online during one semester. The majority of the students are happy with that method of teaching the English language. Similarly, Bernstein (2004) described in his blog posted online titled "Do blogs improve writing?" that, writing frequently online improves students' skills of writing. The scholars suggested that EFL students should use blogs as well as dictionaries or the Internet to see their vocabularies and express their thoughts and feelings obviously. As EFL learners, students who write frequently online and express their thoughts will improve the writing style in English language. According to the above survey, 91% of the students interviewed told that, they will look up the dictionary or the Internet and sometimes ask friends when they are not aware of how to express their thoughts in English language writing. In this study, there are two advantages that can be pinpointed for the purpose of active participation in blogs between students and their peers:

(1) The activities of posting articles, assigning works or even general knowledge topics and inquiries, frequent visits, commenting on these posted data on the blog, receiving comments from other colleagues will increase the rate of collaboration between the learners using EFL writing class.

(2) Students will get involved writing good English due to its importance in cyberspace community as an international language, for a student should work hard to write understandable and correct English language to post on his/her website.

The study presented in this paper builds upon previous studies in the literature. It reports on the students' experience of using blogs for pre-class readings and post-class reflections.

### 4. Methodology

The sample of this study included five ESL graduate students in a one-semester course of teaching methods, and 90 software engineering students in an undergraduate information technology program. The authors used the blogging tool wordpress (Wordpress, 2009). Two blogs were created, one for the ESL course<sup>1</sup>, and the other for the SW (Software Engineering) engineering course<sup>2</sup>.

Students were asked to read an assignment posted on the blog by the instructor. The assignment was a pre-class reading on a selected topic. Students were asked to post any questions or comments they have with regards to the reading assignment on the blog. The students then had a discussion in class on the topic of the reading assignment. Afterwards, they were asked to post their reflections on the blog about their class experience.

To evaluate students' experience on using the blogs, a survey was conducted to measure students' attitudes towards using the blog and its effectiveness as a tool for encouraging pre-class readings and post-class reflections (one minute paper).

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<sup>1</sup> ESL Blog. Retrieved from <http://esldeploma.wordpress.com>.

<sup>2</sup> Software Engineering Activities Blog. Retrieved from <http://sweng.wordpress.com>.

## 5. Results

All students in the ESL program, and 35 students from the software engineering course responded to the survey. The authors asked them if they have used blogs before, and if so, how did they use them. The results are shown in Table 1.

**Table 1 Statistics for students' blog experience**

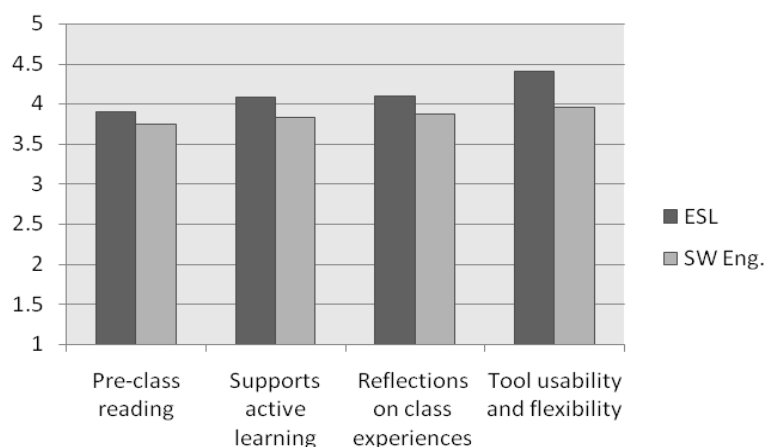
| Have you used blogs prior to this class?   | Percentage (%) |     |
|--|----------------|-----|
|  | SW Eng.        | ESL |
| No   | 34             | 20  |
| Yes, for commenting on someone else's blog | 20             | 80  |
| Yes, for writing on my personal blog       | 46             | 0   |

The authors presented a series of statements, and asked students to rate their agreement level on these statements (5-1, 5 indicates strongly agreement and 1 indicates strongly disagreement).

The survey included 19 statements grouped into four main categories:

- (1) How helpful was the blog for supporting pre-class reading assignments?
- (2) How helpful was the blog in supporting active learning (discussions and peer interactions)?
- (3) How helpful was the blog in supporting reflection on class experiences?
- (4) The usability and flexibility of the tool.

The average of the responses for each group of questions is displayed in Figure 1.



**Figure 1 Students' perceptions on blog experience**

In an open question, students were asked if they had any comments or suggestions for improving the blog experience. The responses for the SW engineering students and the ESL students are shown in Table 2 and Table 3, respectively.

The authors also analyzed the number of comments on the blogs. The average number of posts per student were 2 comments/student for the ESL blog and one comment per student for the SW engineering blog.

**Table 2 Students' comments on the blog activity (SW eng. students)**

|   |
|---|
| If you really want the students to use the blog, you have to give a part of the grade.<br>It's not the best option, but it's the only way to get the interaction started.   |
| We didn't have enough time to actually enjoy working on the blog.   |
| The pre-class blog discussion didn't work for me at all.<br>I think you should figure out another way of discussion because the class discussion at the first time was much helpful.<br>Maybe it should be like a chat that all experts contribute in or anything else .... |
| The idea of a bog is great, it allows one to say his/her opinion whenever he/she feels like it. However, I think class discussion is much more interesting than blog discussion.  |
| In my opinion, the blog discussion was less useful than the class discussion. Also I think more instructor presence is required on the blog.  |
| The part that we were required to read was extremely difficult, therefore, most students were only asking questions on the blog. The discussion was not apparent.   |
| The blog is a nice and good idea but still no yet because the discussions face-to-face is more interactive ...  |

**Table 3 Students' comments on the blog activity (ESL students)**

|   |
|---|
| Some students, like me, do not like face-to-face confrontation. They prefer to express points of view online.   |
| I like reading others points of view and having flexibility in time when doing my homework.   |
| In terms of explaining an idea to a friend, I like to meet her face to face to make sure she got it.  |
| Blogs does not encourage shay students, but help when the teacher discusses with students their comments online.  |
| I have more time to think and rethink, write and rewrite my ideas and organize them.  |
| I think blogs increase the sense of community in the class, because it helps students and teachers to know more about each other's through communication and feedback sessions. |
| This experience inspired me. I love to create my own blog for my ESL students in the future. Thank you.   |

## 6. Discussion

The results show that a majority of students have prior experience with blogs, therefore the technology is familiar. An interesting finding from this study shows that the ESL students and the SW engineering students had similar perceptions towards the blog activity (see Figure 1). The higher average rating by the ESL students might be due to the small sample size.

Looking at the agreement level shown in Figure 1, it can be seen that students generally agreed that the blog activity helped in encouraging students to do pre-class reading assignments. It was also helpful in supporting discussions and peer interactions. They also agreed that the blog supported reflection on class experiences. With regards to the flexibility and usability of the tool, it was the most agreed upon from both classes.

Although student perceptions seem positive, the comments the SW engineering students provided in the survey as shown in Table 2 indicate that they are not completely satisfied with the experience.

The comments of the SW engineering students indicated that there was a considerable lack of interaction and communication between students on the blog. This is confirmed by the authors' observations on the blog, most of the students contributions were questions. There were very rare occasions where one found a student answering or engaging in discussion. This might be due to the factors that: the limited timing of the activity and the difficulty level of the reading assignment. The blog activity was introduced later in the course where students had exams, reports and projects to hand in. With regards to the reading assignment, students complained during the lecture and in their comments that the assignment was difficult to understand, therefore, they only asked questions for

someone to answer.

Another issue raised by the students was that they did not feel the instructor's presence on the blog. This is a very important and critical factor to engage students in the discussion. However, with large classes, this is not always possible.

Comparing blog observations for the ESL course with the SW engineering course, it has some differences. Students in the ESL class have shown reflective interaction and peer support in the discussion on the blog. This may be due to the following reasons: the class size, the maturity level of the students, the nature of the reading assignment and the discipline. The ESL class was very small compared to the SW engineering class, this may explain why the discussions were apparent. In small classes, it is easier for the instructor and peers to engage in discussion. The ESL students were graduate students in an English language learning course, while the SW engineering students were undergraduates in information technology. The reading assignment given to the SW engineering students was a new topic, which has not been introduced to the students before and included a number of complex concepts.

The reading assignment for the ESL students was part of their reading materials in the course. The reading materials consist of several articles on the use of CALL (computer-assisted language learning) in education and some other topics on ESL. Most of the articles were downloaded to the blog for students to read and discuss. It is important to mention that the ESL graduate students were in their third semester of the program. They were more familiar with large assignments of reading long articles and complicated research studies. Another factor due to the small number of students is that, the instructor was mostly available to handle the discussion and comment to students postings.

In general, the results indicate that the blog activity was successful in encouraging students to do readings before class and helped them prepare for the discussion in class. However, considering the successful experience, it is important to consider the class size, the level of students, the reading assignment and the timing of the assignment.

## 7. Conclusion

This paper describes using blogs to encourage pre-class reading assignments and enhance learning and discussion during class.

It proves that blog is an effective tool that can be used to encourage students to do pre-class readings and post-class reflections. The research is also valuable in evaluating students' general attitudes towards the use of blog in higher education. However, for blogs to be effective, the following must be considered:

- (1) The instructor's presence should be more apparent;
- (2) The timing of the activity should be suitable;
- (3) The difficulty level of the reading assignment should be suitable for students to read and understand on their own;
- (4) The suitability of the reading assignment for discussion is important;
- (5) Class size is important, for large classes, sufficient moderation can make the experience valuable.

This study provides a basis for the authors' future research. They plan to introduce blog activities in future

courses, taking into account the lessons they learned in this experience.

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