Technology-supported classroom for collaborative learning: Blogging in the foreign language classroom

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ABSTRACT

This study examined the phenomenon of blogging as a technologically enhanced support to develop interaction and interrelatedness among learners in a foreign language course. A corpus of 62 blog entries and 30 comments the bloggers left on each other's blogs were analysed to find out whether blog may be used to promote connectivity and collaboration among students. The findings of the study revealed interaction between bloggers was limited; thus, the study indicates the restricted use of blog as a tool promoting collaboration in the foreign language classroom. Furthermore, the results identified some of the problems related to technology-based learning and teaching.

Keywords: blog; collaborative learning; technology-supported learning; Foreign Language Learning; web 2.0.

INTRODUCTION

Technology has been applied in Foreign Language instruction for the last 30 years when Computer-Assisted Language Learning (CALL) was developed and implemented in education. This early approach aimed mainly at individualized interaction between the learner and the computer program used to supplement (Beatty 2013:8) or replace the traditional teacher-student interaction, for example thanks to various education apps for mobile learning or interactive animatronic toys that promote interactions between the individual and the toy (Beatty 2013:9) . The numerous benefits (e.g. self-paced and guided learning, immediate feedback, repetitive practice, self-access) encouraged educators to further develop more sophisticated tools that can support learners in their learning. Despite reluctance of many teachers and limitations of learning programs resulting in restraining of students' learning and narrowing the potential of educators (Bowers 2011) , technology-assisted education has been growing in popularity and a continuing advancement in information and communication technology (ICT) has enhanced the quality of education producing a substantive gap between conventional approaches and new technology supported teaching and learning.

Technology assists students in the learning process modifying the way learning is delivered. Now learning has become a personalized and meaningful experience that meets learners' needs as opposed to traditional teacher-centered and text-based education that places primary emphasis on "conveying fixed bodies of information and viewing students as passive recipients of knowledge" (Alavi 1994, p.160). Hence, irrespective of their personal differences, preferences and histories, technology helps to deliver individualized content at the time and place students select (e-learning and mobile learning) thus increasing their learning spaces by taking learning out of the classroom. However, technology-supported learning can also be integrated into classroom teaching offering curriculum abounding in varied activities catering for the needs of every student (blended learning). The term blended learning is applied to learning that uses a variety of "the most effective training solutions, applied in a coordinated manner, to achieve learning objectives" (Wilson & Smilanrich 2005, p.3) usually with the computer or another mobile device that serves as a medium of

facilitating learning and meeting the learning objectives. The most effective application of technology in education is connected with a variety of tools and methods it offers since no single teaching method can meet the needs of various learners (Wilson & Smilanrich 2005, p. 12). Thus, not only does blended learning offer highly individualized instruction but also promotes autonomous and active learning.

Technology supported classroom

Learning always takes place in context and nowadays this means technology-rich context. 75% of American teenagers own cell phones with cell-phone texting becoming a favorite channel of communication between teenagers (Lenhart 2010). Adolescents find their cell phone an indispensable communication channel; they use electronic communication devices mainly to reinforce their relationships with friends (Subrahmanyam & Greenfield 2008). Undoubtedly, mobile devices have changed the world, learners' interaction with the world, as well as the way information is delivered and consumed. Since one of the aims of education is to prepare students for the world and competitiveness of workforce, new technology should be incorporated into the modern curriculum.

An important consideration is how to use technology so that it supported learning and teaching. Web 2.0 tools can be used to address learning outcomes. Web 2.0 (also referred to as the New Web) refers to new Internet tools and technologies that allow their users to go beyond being passive recipients of information, but becoming active and interconnected in the process of receiving, digesting and evaluating information. Most of these tools are free and available to all (Solomon & Schrum 2007); they can be accessed after following a self-registering procedure. Web 2.0 tools include blogs, wikis, photo and video sharing, RSS, and social networking applications.

Technology-supported learning may seem as an isolated activity, but in order to be used to the best benefit of the students, it should be turned into a collaborative task. In fact, learning is effective when it is a social activity. Collaborative learning is group-based learning where learners join their efforts, initiative and work in educational endeavors. In order to turn learning into a social activity, it cannot be based on drills and meaningless, automatic exercises. Social learning involves project-based learning where technological devices serve as tools that support learning. Learners cooperate in order to recognize, analyze, and solve problems. Learning is enhanced when information is presented in the social and meaningful context, which allows to assimilate new information into the already existing schemata hence increasing students' performance in the target language. Having a goal to achieve, students make use of their knowledge and resources available; they develop skills and gain more knowledge while developing and nurturing relationships with other classmates.

Implications of Web 2.0 tools for education are numerous. Web 2.0 tools boost students' creativity (e.g. when they prepare presentations or design web sites) and promote communication and collaboration with other students all over the world (thanks to such tools as blogs, wikis as well as thanks to uploading photos, videos or podcasts). Moreover, new technology allows students to get immediate feedback, which boosts their motivation, interest, and encourages them to research the field they are learning about more thoroughly (students find it easy to study a problem as all concepts on the Web are interconnected through hyperlinks). Thus, learning with Web 2.0 technologies promotes multiple skills, literacy, critical thinking, reasoning, analyzing, organizing information, selecting valuable information, communication, creativity, autonomy, and collaboration. Finally, computer-mediated learning helps to prepare students for lifelong acquisition of knowledge.

A weblog (blog) is an often-updated website that displays entries usually in a reverse chronological order that can be commented by visitors. Blogs usually combine text, graphics, and topic-related

hyperlinks. The popularity of blogs proves that writing is a pleasant activity rather than a tedious task; furthermore, blogs are highly interactive tools (Efimova & De Moor 2005) that combine words and images. When used in a foreign language classroom, students are encouraged to write, revisit, reflect on the feedback, and comment on each other's work, they find the writing task interesting, purposeful and relevant. Hence, blogs have a potential for increasing student interaction sharing and social skills (Gedera 2012). Blog-based activities include writing class-related information and reflective journals, stories, discussion topics, but blogs can also be used to communicate with the parents. Students can also peer review and comment on other students' work, collectively prepare writing assignments or projects.

According to Campbell (2003), there are three types of education blogs for ESL students. First, the tutor blog is run by the teacher in order to give course information, to provide links for self-study online materials, to offer extra reading practice of both the blog post and other related articles linked to it. Another type of blog is the blog run by individual learners or groups of learners as a form of writing and reading practice. Finally, all students contribute to a class blog that not only provides current information on the course and homework but also gives the opportunity to develop research, reading and writing skills. Thus, blogging activities give writing a meaningful purpose. Furthermore, students' motivation is boosted when their posts are read and commented on by authentic audience.

When blog-writing activities are integrated into the course, students develop more positive attitude to learning and motivation to communicate and share ideas with their classmates (Dujsik & Cai 2011; Gedera 2012); an increase in motivation and confidence stems from the awareness that their blog is read and commented on by their peers (Muangnakin 2012). What's more, the students may develop confidence and reduce anxiety when they are prompted to analyze their classmates' strengths and weaknesses in writing (Li 2009).

Lundstrom and Baker (2009) investigated the relationship between commenting on their peers' writing and the students' writing skills. The study showed that both offering and receiving feedback is beneficial; however, the learners who provided feedback surpassed their classmates in writing abilities, which may result from the development of critical thinking skills that commentators make use of while working on their own papers.

However, frequently students need to be encouraged by the teacher to start and comment on each other's blogs; that is why blog-based tasks need to be carefully structured: open discussion questions should be asked, the workload should be evenly distributed, the teacher needs to take an active part in the discussion moderating interaction between students and inviting engagement (Forster & Tam, 2006).

Difficulties of Using Blogs

Despite multiple benefits, technology-supported learning offers several limitations. Some students might be anxious of writing and posting a text that contains various errors; they can be inhibited to post comments on their classmates' blogs. Liu and Hansen (2002) claim that the students' feedback may be constrained by the following factors: learners' cultural backgrounds, their communicative ability and the mode of peer feedback. Other drawbacks of introducing blogging activities in the classroom include feeling anxiety when commenting on their classmates' papers (Amores 1997), decreased motivation when comments prove to be either vague or spiteful. As claimed by Gedera (2012), some students find it difficult to offer constructive criticism on their peers' posts without being rude or hurting the others' feelings.

METHOD

Research Objectives

Taking into consideration the benefits of Web 2.0 tools cited above, the present study sets out to investigate how active and creative the students are when they are engaged in a blogging activity. Literature on blogging in the EFL/ESL context reports contradictory results for the use of blogs to promote collaborative learning. There is a large body of research that support the use of blogs to promote writing skills; however, the present study focuses on the phenomenon of blogging as a technologically enhanced support to develop interaction and interrelatedness among learners in a foreign language course, particularly by the means of providing and receiving feedback on students' work. The aim of the study was to carry out an analysis of interaction among bloggers through the comments they leave on each other's blogs in order to find out whether blog, which is a highly interactive tool (Efimova & De Moor 2005), may be used to promote collaboration in a foreign language classroom. The following research questions guided the study: (1) how are the students involved in using blogs for creating the learning community? (2) what is the nature of the students' comments?

Participants

The participants in this study were students enrolled in a Foundation Course held in a private university in Thailand. This preparatory English course with a duration of 12 weeks provides students with the necessary language skills before they undertake undergraduate or graduate degree studies abroad. A total of 12 students participated in the research; the criterion used in selecting the study sample was linguistic proficiency of the students (above pre-intermediate). The criterion of linguistic proficiency was used in order to ensure the participant are able to express themselves in a foreign language. The results of the placement test the students took prior to enrolling in the Course were consulted in order to determine their proficiency level. Participants in the study were all Thai and either high school graduates (9 students) or holders of bachelor's degree (3 students); they ranged in age from 18 to 25 years. All participants gave their consent before taking part in the study.

Design and procedure

Traditional Content Analysis was used to analyze the blog entries and comments. Content Analysis has been chosen as a research technique as it provides "the systematic, objective, quantitative analysis of message characteristics" (Neuendorf 2002, p.1). Furthermore, this method was the most suitable to meet the objectives of the research as the blogs created by the subjects were simple in form; they did not include hyperlinks to other websites and the distribution of comments was fairly limited. The researcher coded the most important structural features of the blog, including the number of entries and comments each student posted, average length of entries and comments, age of the blog and content type of comments (e.g. informative, relationship, personal). The analysis of the interconnectedness of the comments made by the bloggers was conducted in order to examine the extent to which blogs can be used as a tool of connectivity and collaboration between bloggers in the context of Foreign Language Learning.

The materials in this study consisted of 12 blogs (a corpus of 62 blog entries posted by 12 students). An experimental blog-based environment was organized in which students were asked to write at least 6 entries and comment on each other's contributions. The subject matter of entries reflected the content of the course the students were studying, but the students were encouraged to post their reflections and comments.

The primary aim of the technology-based learning was to facilitate learning and increase student-student interaction. To ensure the educational and communicative aim was fulfilled, a course web site (Learning Management System - LMS) was built in which learners could interact and learn. LMS offers students personalized content, multiple teaching materials, games, and discussion forum that facilitates learning both in and out of the classroom.

RESULTS

First, structural analysis of blog entries has been carried out. Apart from the computation of words, the age of each blog has been recorded as well as the number of comments and inclusion of images. The age of the blog was calculated by counting the days between the day when the first and last entry was posted, with the average blog age at 12,58 days. Table 1 presents the results of the analysis.

Table 1: *Average Number of Words in Blog Entries*

	no of entries	average length of entries (in words)	age of the blog in days	no of comments posted	inclusion of images
blog 1	6	40,33	28	5	yes
blog 2	5	40,2	7	0	yes
blog 3	6	74,5	1	0	yes
blog 4	6	56,33	1	0	yes
blog 5	2	88,5	14	1	yes
blog 6	3	47,33	1	0	Yes
blog 7	6	59,66	7	0	yes
blog 8	4	25,75	7	0	yes
blog 9	6	58	28	10	yes
blog 10	6	53,66	28	8	yes
blog 11	6	57,16	1	0	yes
blog 12	6	95,66	28	6	yes
mean	5,17	58,09	12,58		
total	62			30	

As displayed in Table 1, most students have met the course requirement and published the minimum number of entries, that is 6 entries ranging from 18 to 168 word contributions. However, most of these were quite short (the average length of less than 60 words). Even though the study took 5 weeks, the frequency of posting both entries and comments was very low. The age of as many as 4 blogs was 1 day, which means the students have created their blogs in order to pass the course. Low frequency of posting shows the students' lack of involvement in the task and motivation to join the learning community. All blogs were accompanied by appropriate images; choosing the right pictures and ornaments provided the students with an opportunity to extend their writing skills. However, only the most active learners have posted comments on their classmates' contributions; less than half of the posts received responses in the form of comments. Table 2 presents the detailed analysis of the learners' comments.

Table 2: Structural Characteristics of Comments

	no of comments posted	frequency of posting comments in days	average length of comments	no of comment responses	frequency of comment responses
student 1	5	3	6	3	1
student 2	0			0	1
student 3	0			0	
student 4	0			0	
student 5	1	1	8	0	1
student 6	0			0	
student 7	0			0	
student 8	0			0	2
student 9	10	4	5,22	1	1
student 10	8	3	6,75	1	2
student 11	0			0	
student 12	6	2	4	2	2
mean	2,5	2,6	6,55	0,73	1,43
total	30			7	

Only 5 out of 12 students initiated interaction with their classmates by posting comments on their blogs. This number and the frequency of posting comments (Table 2) shows students' low involvement in the activity. Most students wrote their blogs on several days rather than posting regularly; moreover, they commented on and replied to any comments on a single day or in two days. None of the students replied to their classmates' entry if it was posted on another day than their original entry or comment was posted, which suggests they did not read the comments their classmates posted on their blog entries. The students treated blogging as another teaching activity rather than a forum for exchange of opinions and information. Hence, the idea of creating a community of active members with shared interests and goals has failed. This is further proved in the thematic analysis of blog comments (Table 3).

Table 3 presents information on the nature of each comment content. In social networking sites comments perform the following functions: informative, building relationship, personal. Following these characteristics, the coder has classified the comments according to the function they fulfill. Figure 3 also shows whether the comment that has been posted sparked off other comments (exchange) or whether it was an isolated post.

Furthermore, Table 3 shows that the great majority of comments were isolated comments posted by individual learners. Only one fifth of all posts have been commented on. All of the comments were very brief; the longest comment consisted of 12 words ("Why you want to know my address? I dont live Bangkok."). The shortest one was a one-word comment posted by 2 different students ("Good").

Table 3: *Content Type of Comments*
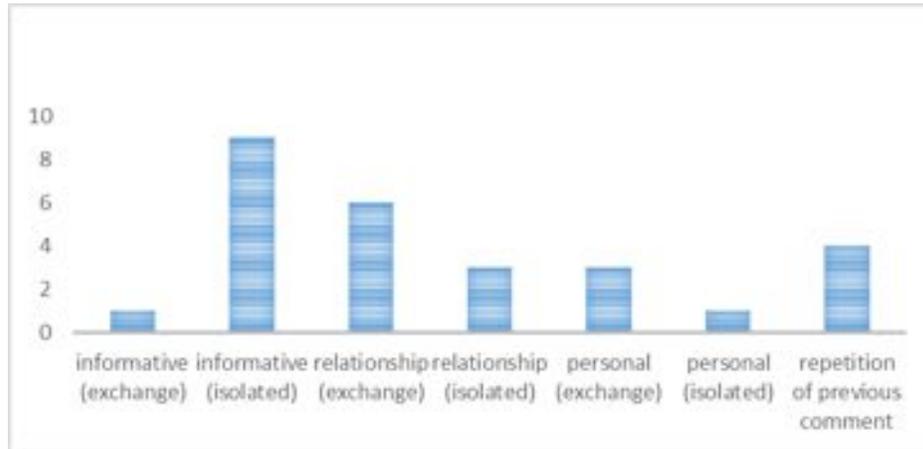
Most comments posted by the learners were isolated; they did not generate any discussion. The students most frequently posted comments that were informative in nature: they referred to the information presented in the entry (e.g. "Fry rice. Good a food.") or posed a question for information (e.g. "Why you wanted to go there?"). Other comments aimed at building relationship with the classmates through an invitation or offer (e.g. "why not go chiang mai with me"), positive comment (e.g. "Petch you very good boy") or opinion (e.g. "petch i think fry rice it's best thai food"). Personal comments included asking questions about personal information (e.g. "What's your address?") or giving personal information (e.g. "I like play golf"). Some comments were a repetition of the previous comment, most probably due to involuntary clicking on the 'post' button.

DISCUSSION

Technology-supported classroom offers flexibility, creativity, and enhanced learning process. Numerous studies (Ali-Hasan & Adamic 2007; Goldman et al. 2008) indicate that blogs, being one of social networks, present considerable opportunities for interaction that is often characterized by high degrees of reciprocity and consistency. Blogs are collaborative in nature as each post can be co-written by members of a larger community who post effective comments rapidly.

Blogs, as a means of instruction, provide opportunities for increased learning spaces and student participation as each student created their own blog. Students assume responsibility for their own learning and take control over the content and form of their blog and comments. However, the present study indicates that blogs do not offer ground for enhancing interaction between learners. The results of the study indicate that interaction between bloggers was limited. The subjects rarely commented on each other's blog and their comments were not conversational in nature. Most students approached the blogging activity as a necessary evil (posting comments on blogs was one of the course requirements) and posted the minimum number of entries, each entry being fairly short yet sufficient to get a passing grade. Furthermore, the frequency of posting both entries and comments was very low. Very few students initiated interaction with their classmates by posting comments on their blogs. Even when comments were posted, they were isolated in nature and did not invite other bloggers to participate in discussion. Hence, increasing collaboration between foreign language learners through blogging activities proved to be impossible to achieve.

It remains to explain why the classroom blog used in the study provoked little interaction between students although numerous studies indicate increased engagement and activity of participants (Dujsik & Cai 2011; Gedera 2012). First, writing blog and commenting on each other's posts did not generate a high level motivation. The students, whose level of proficiency was pre-intermediate and intermediate, could have found it easier and more accurate to communicate in their native language either face to face or through various social networking sites. Thus, the learners were more likely to look for face to face relation or social networks in their native language to strengthen their relation with other learners. Moreover, they could have felt uneasy to offer comments on their classmates' blog entries as they might have been subject to criticism (of their content or structure) offered by the teacher or other students. This explanation is supported by the finding of the study carried out by Amores (1997) who points at anxiety as a major demotivator in posting comments of their classmates' papers.

In the study the teacher acted as moderator of online activities. However, instructional use of blogs will be increased if one of the students was the moderator for the course blog rather than the teacher thus making the blogging activity more learner-centered. The change of moderator could develop the students' involvement in the activity.

Furthermore, blog, especially if it is written in a foreign language and thus requires a great deal of consideration of the content of the comment, proves to erect a barrier to post candid comments on the classmates' entries. Blogs and other social networking sites create a ground for communication where objectivism is hard to achieve and where feelings are easy to conceal. Genuine conversation in the classroom that is provoked by various communicative activities proves to be a better means of practicing the foreign language.

PEDAGOGICAL IMPLICATIONS

Modern technology offers ample opportunities to support and enrich formal instruction. Technology-supported learning offers integration of learning with student needs and cultural experiences; it plays a substantive role in developing autonomous life-long learners that possess skills and knowledge necessary for achieving success in modern rapidly changing world. Finally, technology-assisted instruction promotes collaborative work as students communicate with each other in new meaningful contexts and communicative activities are necessary to be employed in the classroom because the learners' competence develops as their need to use the language increases.

Technologically-supported collaborative learning enhances language development as students learn in social interactions; commenting on each other's work prompts learners to share their experiences, reflect on their own and their classmates' work and analyze it thus developing their critical thinking skills. Despite the numerous benefits, the present study reveals the restricted use of blog as a tool promoting collaboration among the students. Low interaction between the learners can be attributed to low level of motivation and confidence, the feeling of uneasiness while commenting on their friends' posts or inadequate language skills. When they were engaged in the blogging activity, the students frequently fell back on their native language, especially in order to offer numerous comments, share experiences and develop rapport with their classmates.

A limitation of the present study was the relatively small sample size, which makes it difficult to generalize the results to the overall population. Further research is needed to better understand the potential of introducing blogging activities in the foreign language classroom. Study carried out over a longer time frame and larger sample will allow to fully examine social interaction and educational opportunities of blogs.

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