

# Benefits of Cooperative Learning in Weblog Networks

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**Abstract** The purpose of this study is to explore the benefits of cooperative learning in weblog networks, focusing particularly on learning outcomes in college writing curriculum integrated with computer-mediated learning tool- weblog. The first section addresses the advantages of using weblogs in cooperative learning structure on teaching and learning. Attention then turns to issues of opportunities to participate in writing class. For the purpose of this study, the number and content of text contributions made by group members in the blogs including the online responses or asynchronous communication were analyzed. Results indicate that two thirds of learners agreed that using asynchronous communication improved the students' academic development. The benefits of cooperative learning within weblog networks in terms of learner autonomy, cooperative learning, and time management were then illustrated. Educator should stress on the emergence of the insights regarding how technology meets and supports the needs of students. (contains 1 table, 1 figure, and 17 references)

**Keywords:** Autonomy, Cooperative Learning, Weblog

## Introduction

With the focus on language and communication in the major criteria for foreign language learning, foreign language instructors never stop in searching and developing better ways for reaching more effective teaching goals, accessing authentic materials, and providing techniques that will benefit their students' knowledge and enhance their skills in these particular areas. The aims should be stressed advances through the use of technology in education, computerization to empower all students to contribute to environmentally sound sustainable development through their learning process. Indeed, professionals in vocational education have been promoting the use of computers in the classroom for decades. Thanks to the innovative teaching/learning approaches to education utilizing technology, the last two decades have witnessed an increase in computerized instruction in many classrooms. Students in these classrooms are simultaneously learning in new ways with technology. As the use of information technology in classroom instruction has been increasing dramatically around the world, it is natural that it should play a

significant role in the foreign language teaching and learning setting. Through information technology tools, with consideration of research issues of goals, design and development, and assessment, the aims of this study are to facilitate foreign language learners' authenticity of writing and autonomy, and encourage their cooperation (use of cooperative learning). The concept of cooperative learning is achieved by forming small groups to accomplish a common learning goal (Johnson, Johnson, Smith, 1998; Johnson & Johnson, 1989). In this study, the authors seek to promote an effective, alternative avenue for fostering class discussion to course instruction in which technology is used along with the implementation of cooperative learning to enhance students' writing skills in the college language arts education course. The focus of the research is (a) to discover what the ways cooperative learning may be integrated with computer for instruction, and (b) to ascertain the benefits of the cooperative learning in a computer-mediated learning environment.

## **Computer-Mediated Learning Tool: Blogs**

*Educational uses of blogs.* "Blog", launched in 1999, is a hypertext product where people can post/publish their thoughts and receive feedback in a form of links or memos from others in a collaborative space. The term "blog" is a shortened form of the coined word "weblog", which is a sort of "online diary". While this study was to explore the positive learning during students' working process in a small cooperative group, particularly, blogs was used. That concept of cooperative learning refers primarily to small groups of students working together to accomplish a shared learning goal. And the nature of blogs, excellent communication tools for small teams or groups, gives a space via the Internet where students share ideas and work together to jointly express their ideas. Blogs enable students to spend more time working with the community where they contribute the content and hence lengthen students contact time with the input writing with others (Repman, Carlson, & Zinskie, 2004; Armstrong & Retterer, 2004). Taking advantages of this product, the coursework aims to exploit the interactivity and multimedia facilities of computer network to student's foreign language practice.

## **Cooperative Learning via Blogs**

The methods of cooperative learning may be integrated with computer tools in and/or outside of the language arts classroom in various ways. They include formal cooperative learning, informal cooperative learning, and corporative base groups (Johnson, Johnson, & Holubec, 1990, 1991; Johnson & Johnson, 1998). The computer-mediated learning tool, weblog, then can be integrated into the cooperative learning environment, having students work together to achieve a shared learning goal in informal cooperative learning and corporative base groups.

First, in formal cooperative learning groups, instructors deliver the course contents and specify the requirements of the course during the course hours. During the course hours, instructors also observe the students' learning process and offer assistance whenever needed in completing the course requirements accurately and working together effectively. Second, in informal cooperative learning, instructors demonstrate how the blogs can be a working together tool in an online learning environment and allow some time for students to articulate their own learning and engage in discourse with other learners. Therefore, informal cooperative learning

students may continue their focused discussions before and after class. Finally, cooperative based groups are long-term learning working consistently within the same group members towards to their learning objectives. They are permanent lasting from the beginning of the course to the end of the course and provide the support, assistance, and encouragement from one another. The learning takes place within and between classes discussing the assignments. Within the classes, based groups meet to discuss and/or solve the problems and track the academic progress of each group members. Between the classes, they may process their learning in completing the assignments in weblog networks.

## **Course Description**

This research was conducted in Rhetoric and Writing class, a one-semester course work which met in three 50-min lectures sessions with a once-per-week, at the National Formosa University, a vocational 4-year college in central Taiwan. At the beginning of the study, the participants (n= 55) were given introduced to the course content and to the online environment, blogs linking on the World Wide Web, in which they would be working. Besides the weekly face-to-face meetings, the course work was developed an online learning environment that was expected to facilitate the capability of users to articulate their own learning, reflect on it, and engage in discourse with other learners. The use of the blogs was served as a piece of technology and the assignment. Every student has an opportunity to access online at their convenience between classes. The students are expected to work in groups to share ideas, develop a project, or participate in a debate (Bonk & Reynolds, 1997; Gabriel, 2004). Aside from the face-to-face lectures, course work was also conducted online. Regarding to the group project, the participants were required to share their ideas and reflect on these and response on a weekly basis. At the end of the semester, each group were required to submit their final research paper by linking to their blogs. Besides, the participants were also required to read resources discussing online including posting their initial responses to the reading and reading each other's postings.

Taking advantages of blogs, the coursework aimed to exploit the interactivity and multimedia facilities of computer network to student's foreign language practice. To enable the students to participate the course with highly learning motivation, a workshop was given to introduce the software applications and to assist the students to learn how to use (play) them around. Particularly, the researchers agreed with the constructivism that individuals use their existing knowledge and prior knowledge to help make sense of the new material (King & Rosenshine, 1993; Markles, Johnston, Geer, & Meichtry, 1990). The exercises were then assigned so that students could further their learning in the blogs and also could transfer their new knowledge immediately into their applications. An instructor, as a facilitator, consequently, monitored students' learning progress and students' discussions, and answered their questions throughout the learning process. Through the blogs, students might get help from their peers as well as an instructor who monitors the discussions. This study also explored the implications of the use of communication technology in English writing teaching and learning in the context of Taiwan's university.

## **Research Instrument**

For the purpose of this study, the number and content of text contributions made by group members in the blogs including the online responses or asynchronous communication were analyzed. A questionnaire, comprising 20 questions, was developed regarding to the students' experiences of online responses or comments of the online posts. For all items on the instrument, participants were asked to respond on a five-point Likert type scales which ranged “definitely agree” to “definitely disagree”.

## Findings

Survey responses to the 45 questionnaires (response rate = 77.6%) were compiled at the end of the course. An analysis of the data indicated that about two thirds of learners were very pleased with their experience of using asynchronous communication. The benefits of cooperative learning within weblog networks were then illustrated as shown in figure 1.

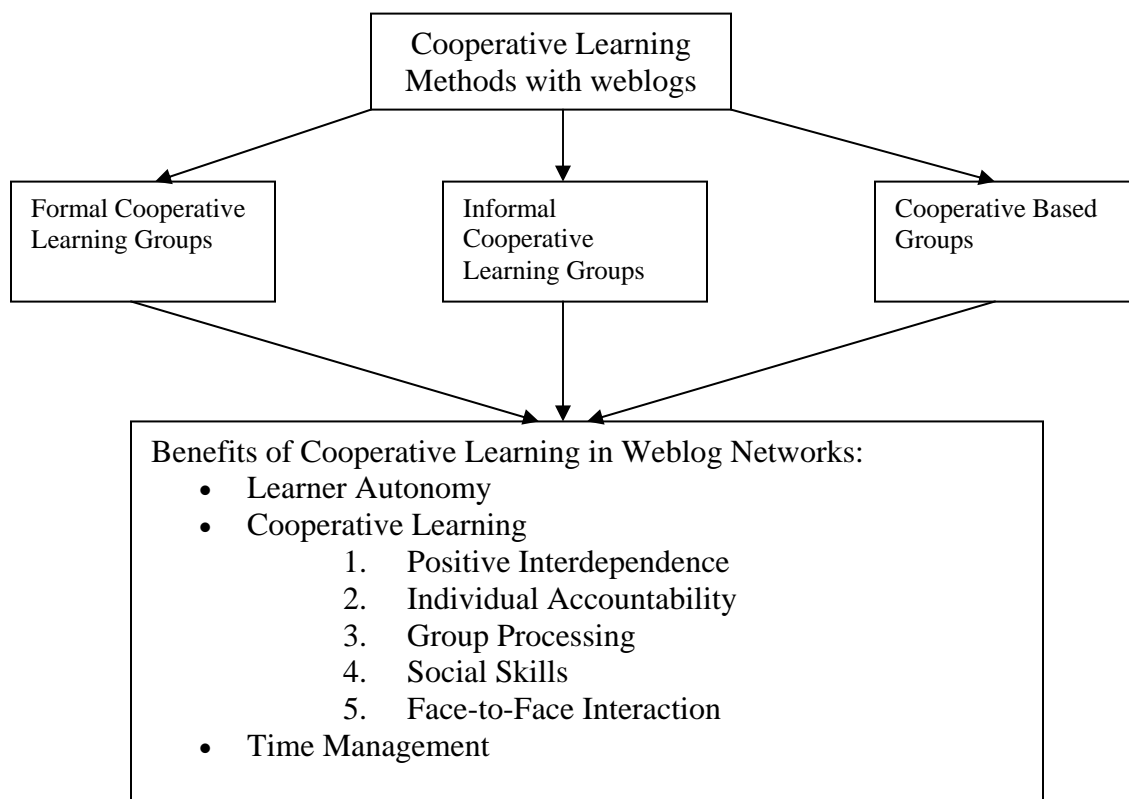


Figure 1: Benefits of Cooperative Learning via Weblogs

A summary of findings is shown as follows.

1. Students described that using blogs working within their group members did increase their confidence in learning. Many (60%) felt that posting online

discussion increased their confidence with writing ability, and 64% considered blogs helpful in increasing their confidence in learning English writing. The activity itself made students involved (73%) and increased their ability to learn from others (80%). Over three fourths (79%) felt their efforts benefited others to learn, and 60% felt prepared to take other courses involved blogs.

2. Some students saw this learning experience was valuable as helping develop their social skills (65%) and teamwork efficiency (56%).
3. More importantly, almost every of the learners described that they were glad to learn to use blogs as their new communication technology tool (93%). However, almost all of them still believed face-to-face interaction also helped their group process the learning to accomplish their goal (91%).
4. Learning outcomes were supported by the survey data divided into three categories: learner autonomy, cooperative learning, and time management as shown in Table 1.

Table 1: Learning Outcomes

Benefits of Learning		Question Number	Agree	Disagree	Neutral
<b>Learner Autonomy</b>	Self-confidence	Q1	60.0%	2.2%	37.8%
		Q2	57.8%	11.1%	31.1%
		Q3	62.2%	0.0%	37.8%
		Q16	64.4%	2.3%	33.3%
	Empowerment	Q4	93.3%	0.0%	6.7%
		Q15	71.1%	2.2%	26.7%
<b>Cooperative Learning</b>	Positive interdependence	Q5	79.0%	4.4%	16.6%
		Q14	44.4%	6.7%	48.9%
		Q17	63.7%	0.0%	36.3%
	Individual accountability	Q6	73.3%	6.7%	20.0%
		Q12	80.0%	0.0%	20.0%
	Group processing	Q7	83.3%	12.5%	4.2%
		Q8	73.6%	23.5%	2.9%
	Social skills	Q9	64.5%	0.0%	35.5%
		Q13	66.7%	2.2%	31.1%
	Face-to-face-interaction	Q10	91.1%	0.0%	8.9%
<b>Time management</b>	Time	Q11	44.5%	13.3%	42.2%
		Q18	40.0%	31.0%	28.9%
		Q19	72.7%	2.3%	25.0%
		Q20	63.7%	2.3%	3.4%

## **(A) Learner Autonomy**

Drown from the reviews of research (Dickinson, 1996; Usuki, 2001; Osei, 2001) and the results of this study, autonomy is necessary for effective learning. Autonomous learning takes place when the learners have the awareness of their responsibility for their own learning, as the sample of this study working together towards to their own group projects. According to Wenden (1991), autonomous learners are “self-confident learners” who believe in their ability to learn and to self-direct or manage their learning” (p. 53). Indeed, it was supported by the results of this study as 57.8% of the participants would feel less pressure to compose a writing using blogs and more than half of them (60.0%) expressed that posting each week to blogs increased their confidence with writing ability. None of the learners (0%) stated that they did not know what they need to learn. In other words, the results clearly marked that the learners got ideas for effective learning through their learning experiences of online communication.

Besides, as shown in Table 1, most of them (93.3%) expressed their gratitude for this chance of learning a new online communication technology, weblogs, and more than half (71.1%) of the participants indicated that this communication tool helped them to get ideas of how to learn outside classroom. The results was consistent with previous studies (Usuki, 2001; Wenden, 1991) that autonomous learning takes place when the external environment (inside/outside classroom) gives affirmative feedback for learners. Hence, the learning would be stimulated towards the plus cycle.

## **(B) Cooperative Learning**

Johnson and Johnson (1989) defined cooperation as “working together to accomplish shared goals” (p.2). As illustrated in Table 1, there are five elements in cooperative learning as follows.

- (a) Positive Interdependence: The authors agreed that learning takes place when a task or a group goal is completely clear. In turn, group members could benefit by knowing that they were a part of whole. A majority of the respondents (79.0%), indeed, believed that their efforts benefited their group towards to the group project.
- (b) Individual Accountability: Three fourths of the respondents (73.0%) indicated that they assessed themselves and gave feedback, which benefited the students by being able to see where improvement was needed. In addition, they (80.0%) agreed that they obtained support and encouragement in completing the assignments. Hence, along with the interaction with other learners or supports from others, the learners could speeding up their learning.
- (c) Group Processing: Most (83.3%) of the respondents believed they were effectively achieving their goals. Seventy-three percent of the respondents also believed that they maintained a well working relationship while few (2.9%) of them had no opinions. Therefore, by group processing, students could then see how to improve their group cohesiveness (79.0%).
- (d) Social Skills: More than half of the respondents indicated that this learning experience helped them learn how to effectively work with diversity via trust-building, communication (64.5%) and conflict management (66.7%). In turn, students learned how to effectively work with diversity.
- (e) Face-to Face-Interaction: Although using weblogs did help the student in learning, most (91.1%) of them still felt that face-to-face interaction promoted each other’s success. In this

part, students did real work together, sharing resources and helping, supporting, and praising each other's efforts to learn. The results supported Johnson, Johnson, and Holubec's (1994) statement that "Cooperative learning fosters exercises that require students to talk and listen, to write, to read, and to reflect on what is being studied rather than listen passively to a lecture" (p. 20).

### **(C) Time Management**

Twenty-eight (63.7%) respondents stated that they could be able to manage their own time to surf on internet and communicate with others via weblogs while only one (2.3%) respondents stated that he/she could not. And yet, only two fifths (40.0%) of the respondents indicated that they found no time to read everyone's posting. Many (72.7%) of them also agreed that they have more time to think and compose responses using weblogs for the course. It indicated that those students would put in an extra effort.

### **Discussion**

The authors also agreed that computer technology could bring about changes in the teacher's role from a knowledge-provider to students' guide in their search for knowledge, and from a classroom lecturer to a coursework designer. They also believed that the online communication promoted autonomous learning among the students. Students learned to manage their own time, process the information, and evaluate their own learning. The results of this study indicated that blogs could be an effective tool for educational use particularly when students are separated by time and place between classes. In this case, students could continue to learn each other after class and support one another. The tool described in this paper dramatically pull out the benefits of cooperative learning using weblogs within small interest group. However, the quality of interaction of online communication is needed to be accessed. Further research might begin to assess the interactivity of use of online communication.

Interestingly, the face-to-face class interaction was also highly needed for fostering students' learning. Therefore, the teacher's role in this process could be one of the important elements to enhance students' learning. Further research might also look at ways in which the teacher's role in this learning process can be improved in order to promote the benefits of cooperative learning in a computer-mediated learning environment.

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