

# Benefits of Web 2.0 in the College Writing Classroom

Jenny Wang, National Formosa University, Taiwan

Ching-Huang Wang, National Formosa University, Taiwan

Yueh-Chiu Fang, National Formosa University, Taiwan

Chun-Fu Lin, National Formosa University, Taiwan

*Abstract: This is the research into the use of Web 2.0 technologies, such as weblogs and social networking, focusing particularly on learning outcomes in college writing curriculum, both in and out of the school environment. The study found that young learners are prolific users of Web 2.0 technologies in their leisure time and the use of Web 2.0 in the classroom could have a cautiously positive impact on motivation and engagement through involving students in more participatory learning. The first section summarizes the variety of actual activity that is embraced by Web 2.0 with examples of websites to illustrate each category. The following section identifies the potential benefits to learning and teaching from implementing Web 2.0 to establish and sustain a participatory, cooperative, creative ethos of enquiry. This study also presents evidence relating to Web 2.0 practices in the educational community. Attention then turns to issues of opportunities to participate in a college three credit-hour Rhetoric and Writing course. This is followed by a discussion of the emergence of the insights regarding how Web 2.0 meets and supports the needs of students.*

Keywords: Participatory, Cooperative, Web 2.0

## What is Web 2.0?

**I**N THE YEAR and a half since, the term “Web 2.0” has clearly taken hold, with more than 9.5 million citations in Google. But there is still no clear definition of what Web 2.0 is exactly, with some people decrying it as a meaningless marketing buzzword, and others accepting it as the new conventional wisdom. So, literally, “Web 2.0” implies a step-change (cf. “Web 1.0”) in the structure of a whole environment of computer activity—namely, the World Wide Web. This change in the Web allows users themselves to make a difference to what the Internet does, navigating and exploring this web of knowledge (see Table 1). In particular, this comes about the idea of collaboration and communication among the users, people and organizations of similar interests.

Though there is a tremendous sense of *déjà vu* about all this, Sir Tim Berners-Lee, the inventor of the World Wide Web, gave a clear definition of Web 2.0 during an interview for a podcast. He was asked whether Web 2.0 was different from Web 1.0 because the former is all about connecting people. The following passage is what he replied in an interview, published on IBM’s website.

*“Totally not. Web 1.0 was all about connecting people. It was an interactive space, and I think Web 2.0 is of course a piece of jargon, nobody even knows what it means. If Web 2.0 for you is blogs and wikis, then that is people to people. But that was what*

*the Web was supposed to be all along. And in fact, you know, this ‘Web 2.0’, it means using the standards which have been produced by all these people working on Web 1.0.”*

*Laningham (ed.), developerWorks Interviews, 22nd August, 2006.*

With the new forms of web designs- Web 2.0 applications, mark new social networking tools for user involvement and engagement with the Web. In other words, Web 2.0 applications clearly have afforded new possibilities for user involvement in what makes up the Internet. The user involvement means participant creates new possibilities for sharing and network with one another. Thus, Web 2.0 is about creating arenas for user collaboration as Sir Tim’s original idea of Web creation. Indeed, it has served in a wide range of community interactions.

**Table 1: Comparison of Web 1.0 and Web 2.0**

Category	Web 1.0		Web 2.0
Source of Content	Static: database-driven web pages	→	Dynamic: web services
Internet Communication	Personal websites	→	Social networking websites
Content Sharing	Publishing	→	Participation: user-generated content and individual production
User Profiling	Advising based on sponsor	→	Creating advising to target individual user
VoIP	None	→	Making voice calls using a broadband Internet connection
Revenue	Page views	→	CPM (cost per thousand impressions) CPC (cost-per-click) CPA (cost-per-action)

Given the users do come with ambitions, it offers a wide range of Web 2.0 activities in various segments of society, including business and educational world. The variety of actual activity that makes up Web 2.0 can be summarized into six basic applications. These applications are: trading, media sharing, social networking, wikis, blogging, and aggregation services, which are described in Table 2 along with examples of websites to illustrate each category. These activities fit easily with modern views on the deeply social nature of human mentality and support communication between users (Alexander, 2006; Cole, 1996; Franklin & van Harmelen, 2007; Tomasello, 1999). For educational use of Web 2.0 applications, such as blogs, wikis, and messaging applications, could be used in a variety of ways to further students’ learning and help students improve their academic performance (Alexander, 2006; Glogoff, 2006; Owen et al., 2006). Also there is a greater emphasis on the emerging technologies in education to boost students’ innovative thinking and problem solving (Surowiecki, 2004).

**Table 2: Major Applications of Web 2.0 Activity**

<b>Category</b>	<b>Brief Description</b>	<b>Examples of Well-known Websites</b>
Trading	Through Internet communications, users complete transactions of buying, selling, or exchanging.	<a href="http://ebay.com">http://ebay.com</a> <a href="http://craigslist.org">http://craigslist.org</a> <a href="http://amazon.com">http://amazon.com</a> <a href="http://etrade.com">http://etrade.com</a>
Media Sharing	By web-accessible tools, users store and share multimedia files in an easy to view format.	<a href="http://youtube.com">http://youtube.com</a> <a href="http://video/googles.com">http://video/googles.com</a> <a href="http://flickr.com">http://flickr.com</a> <a href="http://snapfish.com">http://snapfish.com</a> <a href="http://blogtv.com">http://blogtv.com</a> (for cell phones)
Social Networking	Websites that structure social interaction activities with people who shares similar interests.	<a href="http://myspace.com">http://myspace.com</a> <a href="http://facebook.com">http://facebook.com</a> <a href="http://orkut.com">http://orkut.com</a> <a href="http://linkedin.com">http://linkedin.com</a> <a href="http://friendster.com">http://friendster.com</a> <a href="http://spaces.live.com">http://spaces.live.com</a>
Wikis	A website that allow users to visit or access it to edit via an easy-to-use on-line editing tool and create its pages.	<a href="http://wikipedia.org">http://wikipedia.org</a> <a href="http://tvov.org">http://tvov.org</a> <a href="http://wikiineducation.com">http://wikiineducation.com</a>
Blogging	A web-based journal or diary that allows users to post text, sound, and video in online communities.	<a href="http://blogger.com">http://blogger.com</a> <a href="http://livejournal.com">http://livejournal.com</a> <a href="http://opendiary.com">http://opendiary.com</a> <a href="http://radar.oreilly.com">http://radar.oreilly.com</a> <a href="http://twitter.com">http://twitter.com</a> <a href="http://digg.com">http://digg.com</a>
Aggregator Application	Gather information across the Web from a global information space and publish in one place, including RSS (Rich Site Summary or Really Simple Syndication) feed aggregators. Users can subscribe to a site and check for updates to the content of RSS-enabled pages automatically whenever updated without going to the sites. The information could be audio/video files (podcasts) and text files.	Application: Zune application iTunes application  RSS-enabled websites: <a href="http://cnn.com">http://cnn.com</a> <a href="http://time.com">http://time.com</a>

## **Purpose of the Study**

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. 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. 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 the impact on teaching and learning from using Web 2.0, and (b) to ascertain the benefits of Web 2.0 in a college writing class.

## **Course Description**

This research was conducted in Rhetoric and Writing class, a one-semester course work which met in three 50-min lecture 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 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 expected to facilitate the capability of users to articulate their own learning, and engage in discourse with other learners in an online learning environment. The use of the Web 2.0, blogs 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 respond on a weekly basis. At the end of the semester, each group was required to submit their final research paper by linking to their blogs. 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 advantage of blogs, the coursework aimed to exploit the interactivity and multimedia facilities, offered using the computer networks to students' foreign language practice. To enable the students to participate in the course with a high 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) and they make meanings through the interactions with each other and with the environment they live in (Guthrie, et al., 2004; Vygotsky, 1978; Wertsch, 1988).

A free subscription to create a blog was used for this study. The students were asked to create an account and obtain the blog from Blogger.com (<http://www.blogger.com>). Three easy steps to “play” with it: (1) create an account, (2) name the blog, and (3) choose the template. Following by few seconds, the blog can be ready for publishing/posting messages, which is called primary messages. After then, the message is available for other users to view and post their own comments or reactions, which is called secondary messages.

The exercises were then assigned so that students could further continue their learning, using the blogs and also could transfer their new knowledge immediately into their applications. An instructor, as a facilitator, periodically monitored the 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.

*Educational use of blogs.* “Blog, blogging, blogger”, these three words lunched in 1999 according to the online version of the Oxford English Dictionary (2004). It is a hypertext product where people can post/publish their thoughts and receive feedback in a form of brief paragraphs of opinions, information, personal diary entries or links from others in a collaborative space (Doctorow et al., 2002). The term “blog” is a shortened form of the coined word “weblog”, which is “online diary on web site” (Encarta World English Dictionary, 2009). They are both often used interchangeable. Some definitions and descriptions of a blog or blogs include the following.

1. “A frequently updated personal journal chronicling links at a web site, intended for public viewing” (Encarta World English Dictionary, 2009).
2. “Blog-Web logs with news, opinions, and other information” (Much Ado About Blog, 2004, p.19).
3. “amateur websites that provide news, information and above all, opinions to rapidly growing and devoted audiences drawn by nothing more than a shared interest or two and the sheer magnetism of the editor’s personality” (Grossman, 2004, p. 65).

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 (Armstrong & Retterer, 2004; Repman, Carlson, & Zinskie, 2004). Anticipating the emergence of the advanced pedagogically meaningful Web 2.0 applications, the coursework aims to help the students progress their foreign language learning.

## **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 therefore developed regarding 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 scale 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. Findings then are divided into two categories, impact on learning and teaching and benefits of Web 2.0 in the classroom.

### ***Impact on Learning and Teaching***

Findings on impact are indeed positive. These are found in the data, though differing degrees:

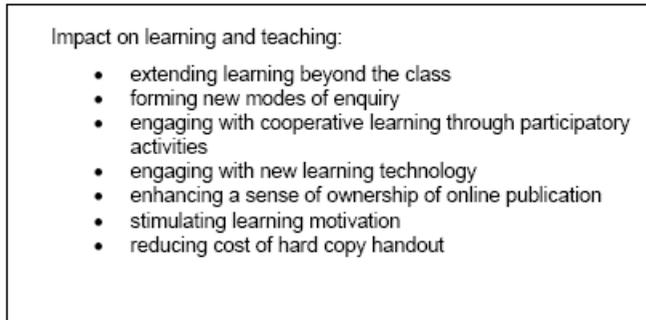


Figure1: Impact on Learning and Teaching via Web 2.0

From using Web 2.0, it involves students in more participatory learning, and therefore, it establishes and sustains participatory, cooperative, creative ethos of enquiry. For example:

1. Web 2.0 provides an alternative opportunity for students to search for an answer and meet their needs. Students get an opportunity to continue their learning outside classroom. Most of the participants (93.3%) expressed their gratitude for this chance of learning a new Web 2.0 technology and almost two thirds (71.1%) of them indicated that this communication tool helped them to get ideas of how to learn after the class. The results were 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.
2. Students were able to become familiar with another innovation of Internet application that has powerful communication capabilities. Also, this kind of new mode of enquiry is the topmost reward for the learner (Crook, et al., 2008). With the reward of this, students were given a high motivation to pursue their learning. Hence, the learning would be stimulated towards the plus cycle.
3. The social Internet affords new opportunities for engaging in cooperative learning activities. Through social dialogues, students explored more ideas and constructed further knowledge. Students described that the activity itself made them involved (73.0%) and increased their ability to learn from others (80.0%). Over three fourths (79.0%) felt their efforts benefited others.
4. Blogs offer users unprecedented opportunities to create their own content- to publish text-based or multimedia to a wide audience. Participants in this study constantly created their own content by themselves or/and with their peers. Such activities enabled them

to develop and demonstrate their individual talents. They also obtained a sense of ownership of their own publication that highly motivated them to generate and practice their writing comprehension. Many (64.0%) considered blogs helpful in increasing their confidence in learning English writing.

5. Information was shared electronically. The class administration cost was reduced by not distributing hard copy format of handout. Clearly, online sharing information actually made it more readily and easily than if it was given to them in hard-copy format (Quible, 2005).

## Benefits of Web 2.0

The benefits of learning integrated with weblog networks were then summarized as follows. Particularly, Johnson and Johnson (1989) defined cooperation as “working together to accomplish shared goals” (p. 2). As illustrated in Figure 2, there are five elements in cooperative learning as follows.

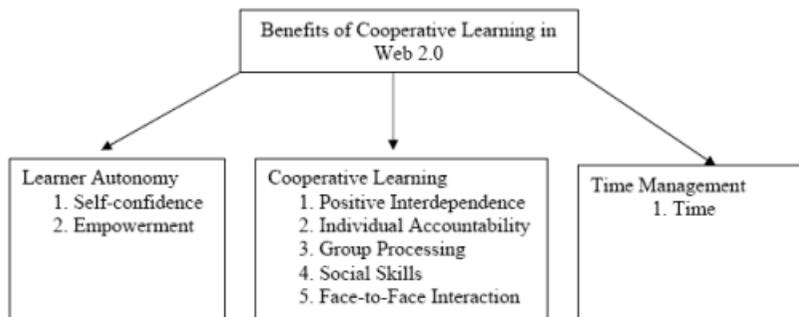


Figure 2: Benefits of Cooperative Learning via Web 2.0

A summary of findings is shown as follows.

1. Students described that using Web 2.0 social activity, Weblog, working within their group members did increase their confidence in learning English. 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 many (60.0%) felt that posting online discussions increased their confidence with writing ability, and 64.4% considered blogs helpful in increasing their confidence in learning English writing. The activity itself allowed the users to make a difference to what the Internet does. Therefore, students felt they actually involved (73.3%) and increased their ability to learn from others (80.0%). Particularly, the users in interest cast as a learner, and this becomes an intriguing opportunity. Over three fourths (79.0%) felt their efforts benefited others to learn, and 60% felt prepared to take other courses involving blogs or other Web 2.0 activities. Hence, along with the interaction with other learners or supports from others, the learners could speed up their learning.
2. Such sharing can evolve into more organized forms of joint knowledge building and provide scaffolding in a set of blogging pages for individual and group work. Web 2.0

in this study was about offering an appealing route for student collaboration. Some students saw this learning experience as valuable as helping develop their social skills (64.5%) and teamwork efficiency (66.7%). In turn, students learned how to effectively work with diversity via trust-building, communication and conflict management.

3. More importantly, almost every of the learners (93.3%) described that they were glad to learn to use blogs as their new Internet application that appears powerful communication capabilities. However, almost all of them (91.1%) still believed face-to-face interaction also helped their group process the learning to accomplish their goal. In this part, students did real work together, sharing resources and helping, supporting, and complimenting each other's efforts to learn.
4. More than half of the respondents (63.7%) stated that they could be able to manage their own time to surf on the Internet and communicate with others via weblogs. Many (72.7%) also indicated 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 working on projects/assignments with groups.

### **(A) Learner Autonomy**

Drawn from the reviews of research (Dickinson, 1996; Osei, 2001; Usuki, 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 toward 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 felt less pressure to compose a writing using blogs and more than half of them (60.0%) expressed that posting each week on blogs increased their confidence with writing ability. None of the learners (0.0%) 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, 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 after the class hours. The results were 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**

The concept of cooperative learning is achieved by forming small groups to accomplish a common learning goal (Johnson & Johnson, 1989; Johnson, Johnson, & Smith, 1998). As illustrated in Figure 1, there are five elements in cooperative learning as follows.

- *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%) truly believed that their efforts benefited their group towards to the group project.

- *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 speed up their learning.
- *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%).
- *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. This has been shown to be an important dimension in computer-mediated learning (Kreijns, Kierschner, Jochems, & van Burren, 2007).
- *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 complimenting 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, in addressing that students will be spending more time learning in groups, working with other learners, and being creative.

### **Conclusions and Discussions**

The researchers 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 Web 2.0 could be an effective tool for educational use particularly when students are separated by time and place between classes. Teaching approach can be aided by Web 2.0 tools as mediating mechanisms between collaborating students and between

students and teachers without time and place boundary. It is therefore clear that current thinking about the implementation of new learning Internet tools in classroom curriculum is in step with the affordances of Web 2.0 activities.

In this case, as the opportunities afforded by Web 2.0, students could continue to learn from each other after class hours and support one another via posting and sharing comments on weblogs. The tool described in this paper dramatically pulls out the benefits of cooperative learning using weblogs within small interest group. There, Web 2.0 activity created a stronger sense of informal community and informal communication which is consistent with the previous studies of the importance of “classroom climate” effects on students’ learning (Kreijns, Kierschner, Jochems, & van Burren, 2007). However, the quality of interaction of online communication on the open Internet is needed to be accessed. Further research might begin to assess the interactivity and concerns about e-safety of use of online communication. In a long-term run, instructors could also implement other kinds of Web 2.0 activity into their class curriculum. For example, blogs and RSS feeds can be used for classroom routine circulations. Podcasting can also be incorporated for important lectures to send out the messages to the students’ cell phones or other technology devices.

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 the learning process can be improved in order to promote the benefits of cooperative learning in a computer-mediated learning environment.

Yet, it is hard to find a university where Web 2.0 opportunities have been deeply integrated in course structures. These new technologies could allow universities to reinvent themselves. Universities will have to revisit their learning and teaching strategies as well to ensure that they take account of new opportunities and enable new approaches to the classroom/campus. Further work and research to identify and address the development and availability of adopting the use of such Web 2.0 activity for institutions is critical.

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## **About the Authors**

### *Dr. Jenny Wang*

Jenny Wang received her Ph.D. in Workforce Education from The Ohio State University. She is currently an assistant professor in the Applied Foreign Languages Department at the National Formosa University.

### *Dr. Ching-Huang Wang*

Ching-huang Wang, Associate Professor and Chair in the Department of Applied Foreign Languages at National Formosa University, Taiwan, is mainly engaged in research in TESOL, bibliotherapy, identity, critical literacy, and syllabus design.

### *Dr. Yueh-Chiu Fang*

Yuehchiu Fang received her M.A. in TESOL from Long Island University and her Ph.D. in Language and Literacy from The Pennsylvania State University. She is currently an associate professor in the Applied Foreign Languages Department and the Director of the Language Teaching Center at the National Formosa University. Her interests include the teaching of ESL/EFL writing and oral fluency, and also the research related to the curriculum design in English Language.

### *Chun-Fu Lin*

National Formosa University, Taiwan

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