

Increasing Students Participation in English Vocabulary Classes by Providing Time Flexibility in Accomplishing Exercises

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The study was conducted to find a solution for the problem of students' participation in an English Vocabulary course. The solution proposed was using a combination of online exercises and Tapped In as a free virtual learning environment. The study was conducted on the basis of classroom action-based research. It was conducted in two different cycles. The results show that this method increased students' participation, and that learners demonstrated a positive attitude toward the use of the computer for both the online activities and Tapped In for vocabulary learning.

Introduction

The use of technology for instruction has been widely introduced by researchers and instructors in the previous decade, and there are many examples of the use of information technology for language instruction (see Biesenbach-Lucas, Meloni, & Weasenforth, 2000; Torii-Williams, 2004; Henri & Li, 2005; Vinagre, 2005). Technology has been used in the teaching of most of the language skills and language areas now, and the range of tasks is as varied as the types of technology used (e.g., Stockwell, 2007).

Furthermore, the emergence of Internet with its www sites has been another powerful media for shaping the process of instruction. The Internet has played a role in enriching interaction between students and teachers and providing a less monotonous way of delivering materials that is sometimes the case in conventional face to face (f2f) settings. It also has the potential to provide various sources of information for both students and instructors with only a few clicks of the mouse.

Exploration of Problems

The teaching of English as a foreign language has its own difficulties in an Indonesian context because it is completely new for the students, and it takes great effort on the part of both the teacher and the students to be able to enjoy the teaching and learning activities. EFL teachers tirelessly try to do their best in the class for their students to make progress, while at the same time, the students on the other side also struggle to catch up with each topic of discussion in the class.

The instructors, however, because of the heavy loads of teaching responsibilities often lose their sensitivity to understand what students actually feel about the activities that have been previously designed, and they very often have to use the same teaching activities for different students of the same course. There are times when the students want something different, something to cheer them up, something to decrease their anxiety, something challenging for them to try, or something that provides the students with flexibility in terms of learning progress that allows for the fact that any single individual student is different from the others in how they make academic progress.

This difference is particularly relevant to the teaching of vocabulary for EFL students, where problems such as heterogeneity of cognitive ability and students' engagement on the instructional activities become even more apparent. Students are, of course, undoubtedly heterogeneous from the cognitive perspective, which can be a great problem in traditional methods of teaching where the pace of learning for every single learner is difficult to consider. Additionally, engagement of the students in the activities designed for f2f instruction for, in this case, an English vocabulary course is often given little consideration by teachers themselves, largely due to the monotonous nature of many activities in the classroom. This certainly affects students' performance and their academic achievement in the English Vocabulary course, but this is not always true that low engagement correlates to low achievement. Some studies on the use of information technology have suggested that by providing virtual activities, passive students in f2f activities can be very productive for sharing ideas or comments on the virtual activities or, at least, shy students have a medium to express themselves (see Jense-Lee & Falahey, 2002; Lau, 2003; Absalom & Marden, 2004). It was this increased participation of learners in online activities that provided the stimulus for undertaking the current study as a solution to solving the current problem of students' low participation in the English vocabulary course.

The aim of the paper was thus to examine students' participation and attitudes toward the use of online exercises in the English vocabulary course at Universitas Pendidikan Ganesha, where online exercises were proposed as a solution for the current problem faced by teachers of the course of how to increase student participation.

Literature Review

The use of the web for instruction, especially English as a foreign language, has started to attract the greatest interest since the late 1990s. The web has been used as a source of information, for group projects, and as a medium of virtual instruction (see Chang, 2005, 2007; Wu & Tsai, 2005). Since its inception, the use of web-based virtual learning for teaching English as a foreign language has undergone rapid development. According to Gibson

(2003), web-based learning brings several advantages in terms of customisation, personalisation, narrative structures, alternative story options, simulation, and an alternative learning environment. Furthermore, Zachary, McCollum, McNamara, Stokes, Blickensderfer, and Schofield (2006) demonstrated that web-based learning can also be used in distance learning environments.

For vocabulary specifically, Loucky (2005) found that using various online learning resources increased EFL students' vocabulary mastery and reading speed. He also used an online dictionary to help learners decrease their confusion over meanings of unknown words and increase efficiency for searching new words.

Other studies concerning web-based vocabulary instruction were conducted by Chan and Liao (2005), and Nielsen, Hanseen, and Overgaard (2005). Chan and Liao (2005) developed a web-based Chinese-English vocabulary concordancer on collocation learning, showing that the students' final performance was better than their entry level as measured by using pre- and post-tests. Similar findings were also found by Nielsen, Hansen and Overgaard (2005) who designed a system for web-based learning of Arabic as a foreign language, finding that qualitatively the web-based instruction gained a positive response from the students.

The empirical findings above show that the use of online learning for FL vocabulary learning has a positive effect on the learning process on the part of the students, be this in terms of vocabulary progress or learner attitudes, suggesting an effect that relates to academic achievement either directly or in a round-about way.

Procedure of the Online Vocabulary Exercises

The study was conducted on the basis of classroom action-based research. The subjects involved were 27 students who were taking an English vocabulary course at the English Department of the Universitas Pendidikan Ganesha in Bali, Indonesia.

During the study, Tapped In (www.tappedin.org) was used as the virtual learning environment. Some resources that are available through Tapped In include a chat tool and a discussion board for communication purposes. Before the online activities were started, the students were invited to activate their membership to a "Vocabulary Group" on the Tapped In site. In addition, a questionnaire on computer literacy was also administered to them via e-mail, and at the end of the study, a questionnaire on attitudes was administered. During the study, they were required to attend a virtual meeting once in a week in the Vocabulary Group on Tapped In. From this group, communication could be maintained using the synchronous chat tool, and the students could access the links for online vocabulary exercises as well as an online dictionary.

The exercises used are available at <http://projects.gw.utwente.nl/masters-edu/suarcaya/1> and <http://www.geocities.com/whiteheron911/crosswordpuzzles.htm>². The latter is from resources that are available at www.CALL4ALL.us.

1 developed by the author himself

2 developed by William Balsamo

Findings

The First Cycle

There were three different online meetings conducted during the first cycle of the study. The meetings were conducted on March 29, April 4, and April 11, 2007. In the first meeting the students still had problems regarding how to access the Vocabulary Group from the virtual *Tapped In* (TI) Reception, and were all stuck at TI Reception. Only nine students out of 27 could participate in the first meeting. The rest were absent because they either had not yet activated their membership in the Vocabulary Group, got confused how to access the group, or had technical failure (the computer used did not have Java Applets to enable the use of the chat tool). In this first meeting, the students were introduced to *Tapped In* and also the types of exercises which were available in the different sites. Most of the time in this meeting was used to help the students to go to the Vocabulary group in *Tapped In*.

In the second meeting, the students worked the exercises which were linked from Tapped In to both <http://projects.gw.utwente.nl/masters-edu/suarcaya/> and <http://www.geocities.com/whiteheron911/crosswordpuzzles.htm>. The previous site was used as the main English vocabulary source. When the students had finished with the main exercises they were advised to go to the latter site when time was available. Fourteen students could attend the second meeting, some of them having the same problems as in the first online meeting. In this second meeting, the exercises available at <http://projects.gw.utwente.nl/masters-edu/suarcaya/> were updated with new exercises but they were of the same types. The first type of exercise was matching and the second one was listening (audio). The students still found the first exercise was too difficult for them to work out, and it took them more than 30 minutes to accomplish it, with many logging off even before the exercise was discussed. One factor that could also be identified in this second meeting was that the students did not logged in at the same time. Most of them were late to join the class because of technical problems or the availability of computers at an Internet cafe. This caused the time of the online meeting to be prolonged which made the students who were online on time unhappy. As a result, these students logged off and were soon followed by the others.

Finally in the third meeting, the results showed that the students could not really work out the second exercise (a listening exercise based on a song). None of the 19 students who attended the online meeting could do the exercise because of several problems, namely: there were no speakers/headsets available; the Internet speed was too slow to play the song; and the exercise was too difficult for them to complete. As was the case in the previous meeting, in this third meeting the students could not finish working out the exercises, either.

At the end of the first cycle, reflection was done regarding the findings. The students' participation did increase. It however had not yet reached the minimum level of 75% (which was the target participation level) as can be seen in the following figure. The participation was only 53% (as calculated by the number of messages posted by the students as a percentage of the total messages).

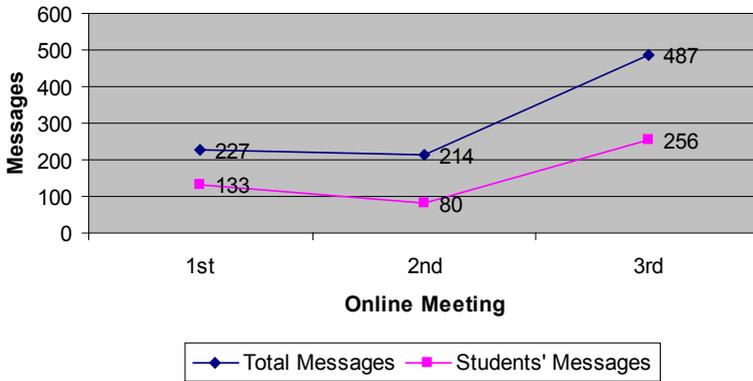


Figure 1. Students' participation

In this case, participation was calculated from the messages posted by the students during the chat interaction. Student participation could not be seen from the students' work because the sites where the online exercises were hosted did not keep logs of the results of the students' work, which was considered as a major weakness of the first stage. Finally, the reflection resulted in the conclusion that a second stage should be conducted to allow an opportunity to deal with some problems faced during the first cycle, and to attempt to reach the student participation level of 75%, which was decided as the criterion of success. Some improvements were done in the second cycle. The improvements were:

- to lower the level of difficulty of the contents of the exercises;
- removal of external links to avoid students being confused in navigating between pages at *Tapped In*, and rather only the tools available at *Tapped In* such as discussion board to post exercises, instead;
- due to technology constraints, materials were to be delivered in plain text, without the use of audio or multimedia exercises;
- students were permitted to attend the official online class every Wednesday, at the designated time, but they were also permitted to work on the online exercises earlier or later, as long as not they did not go beyond Saturday of the week. So, they did not need to go online on the fixed schedule, but rather were free to log in and do the exercises as their schedule permitted.

The Second Cycle

In the second cycle, the students' participation was based on the exercises accomplished. Every week over three consecutive weeks, there was either one or two exercises for the students to accomplish. The students could read the new exercise on the discussion board in the Vocabulary Group.

The topic of the first week's exercise in this second cycle was multi-word verbs, and there were 13 students working on the exercise. They all submitted the exercise on April 16, 2007. None of them logged in after the scheduled meeting. None of students used the online dictionary, and some of them even brought their own dictionaries from home.

The second set of exercises was posted on April 24 and 25, 2007. These two exercises were completed by 19 students. During the end of April 2007, the students—particularly those who were online and could chat with the author—were taught how to use online dictionary. The dictionary itself was linked to the Vocabulary Group on *Tapped In*.

In the last exercise, the topic discussed was *Permission*. It was posted onto the discussion board on April 30, 2007. The exercise required the students to work in pairs based on the condition posted onto the discussion board. The total number of students who accomplished the exercises was 24 out of 27, which was a total of 89%, completing the exercises at different times ranging from May 2-8, 2007. An interesting incident happened on May 8, 2007 when another online instructor joined some of the students in the meeting. All the students were began eagerly asking questions to her, until she finally suggested posting the questions in the discussion board which she promised to answer later.

After struggling with technical problems in the beginning, most of the students were relatively able to follow the online class though the number of students who involved in it did not reach 100%. Additionally, the second cycle showed that some progress was achieved despite the problems faced, the most notable being the increase in student participation in the online activities, as shown by Figure 2.

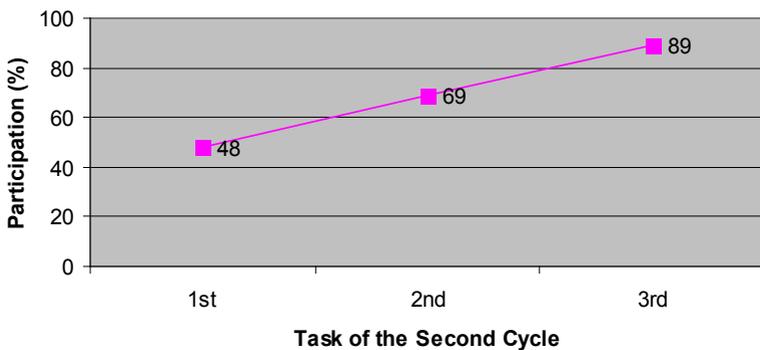


Figure 2. Students Participation in the second cycle

The student participation increased sharply from 48% up to 89% from the first to the third session. This figure above also meant that the minimum level of achievement had been achieved in this second cycle.

At the end of the study, a simple survey regarding students' attitudes (in using the computer and *Tapped In*) was distributed via e-mail. The questionnaire was a 5-point Likert-

scale. Of the 27 students, only 16 students returned it completed. The results showed that students attitude in using computer and *Tapped In* was relatively positive, achieving 4.12 for using the computer, and 3.91 for using *Tapped In*, both from a maximum of 5.

Discussion

There were two cycles conducted in this study with some improvements introduced in the second cycle. The first cycle showed that the students really had problems with technical matters related to Internet use, and also with navigating the pages at *Tapped In*. All of the online activities, such as activating membership and carrying out online exercises were relatively new for many of them. This was shown by the results of the first questionnaire on the students' computer literacy administered in the beginning of the study, indicating that the students' computer literacy was low.

This to a certain degree is also worsened by the absence of ICT facilities on campus for students to use. Collis and Moonen (2004) emphasised that support for students is essential if an ICT program is to be successful in campus. The support can be in forms of availability of computers, provision of computers to purchase at low prices, Internet connection on campus, and printing facilities. In the case of the present study, all of these forms of support were absent, and the students had to struggle to find a computer with an Internet connection, which is only available in a few Internet cafes in town. Furthermore, not all of the computers available were equipped with Java to enable chat at *Tapped In*. This lack of support influenced the number of students who were involved in the online activities, especially in the first cycle.

In the first cycle, the students had to be online while at the same time the number of computers with Java Application installed was also limited. This made some of the students stand in queues and wait even after the online class had commenced. The students were waiting helplessly until there were computers available for them to use. Some students also used their friends' accounts to participate in the class because of the same constraints. Students who were not so inclined to persevere found all of these problems discouraging, perhaps to the extent of reducing their willingness to carry out the online activities. Fortunately, the results of improvement in the second cycle showed a different trend as seen through observation of learner usage, and through the questionnaires administered. The following discussion will go into more detail to different aspects of the study.

Learning Flexibility

As has been stated above, this study consisted of two different cycles. The reflection done in the first cycle showed that the online meeting was not successful at increasing the students' participation to reach the targeted criteria of success. To follow up the results of reflection, a second cycle was then conducted.

In the second cycle, the improvements were more on the flexibility of time in working out the online exercises. The online meeting with synchronous communication was no longer compulsory for the students to attend, but they were required to work on the exercises anytime during the week. They had choices of attending the online meeting if

they thought they needed assistance, or they could simply go online at different times to complete the online exercises as necessary.

Furthermore, the online exercises were designed in such a way that a discussion board was used post the online exercises. By doing so, all students' activities were done within the *Tapped In* environment rather than accessing outside links. The students needed only to read the discussion board every time they logged in and also replied to the exercises at the same place.

In the previous cycle, online exercises were provided in different sites that were accessed by the students from *Tapped In* through links provided in the *Featured Items* menu. The use of different resources required the students to go to different pages and then back into *Tapped In* several times. This was a bit difficult to do for them as a result of both connection problems and problems with navigating the web pages.

There was one other implication which could be made from the improvements done in the second cycle, this being the decrease in the number of students in the online meetings. The online class was attended by fewer students than it was in the first cycle. The findings in the second cycle, however, showed that the number of students who finished the exercises had increased, meaning that those students who did not attend the online meeting were online at different times. This clearly demonstrated the importance of providing students with flexibility, especially in terms of time.

In the context of this study, feedback could only be provided once at the end of the online program. This is because the students could only go online once a week due to constraints with Internet facilities both at campus and at home. Reflection on how the classes were held led to the conclusion that inviting feedback from the students would be important for improving the process of instruction and the students' progress. This feedback should not only be given at the end of the program, but it is also very important to provide it regularly. From the feedback, the students can reflect on how far they have made progress, while at the same time, the instructor can identify the source of problems to deal with in the following sessions of the online activities.

Design of instruction

Design of instruction here refers to how the content is delivered and the strategy of instruction being used. Rosenberg (2001) states that the way content is presented in online learning influences the success of the online instruction. This means that delivering content for online instruction is not the same as presenting content for conventional face-to-face instruction. The contents used for online instruction should be as clear as possible for the students to enable them to be independent learners.

The content of the online exercises in the first cycle was delivered by using several types of exercises and from different sites. *Tapped In* was used only as a virtual environment to facilitate the students in working out the exercise. From *Tapped In*, the students had to open the links provided to work out the online exercises. This step seemed very simple on face value, but the students found it very complicated, and some failed to open the exercises meaning that it took quite a long time before the exercises themselves could be started.

Furthermore, the exercises themselves were considered a problem, especially the exercises with audio. It seemed to be the slow connection which was the primary cause, and the audio exercises took too long for the students to listen to. These were removed and changed with other exercises posted in the discussion board in the second cycle. It was when the exercises were posted on the discussion board in *Tapped In* that the problems of dealing with navigation decreased. The steps to work out the exercises were simpler than during the first cycle so that the students could concentrate more on the exercises than on the technical matters.

The students needed a simple interface which involved only a few clicks, and the same thing also applied to the form of the exercises. The students were not very familiar with drop down menus, so in this case, it was wise to start with simple steps and simple exercises, both in form and in degree of difficulty. This was proposed by Russell (1989) nearly two decades ago, who suggested that the materials should be simple enough for beginners, but where learners who are keen to make progress can slowly progress through more difficult ones.

The need for simple forms of exercises is also due to the communication infrastructure available. The fastest Internet connection available at the time was only 36 KB/second. This connection very often dropped to only 16 KB/second, meaning that to open a page of an e-mail may take several minutes. Based on this fact, the simpler the communication infrastructure and ICT facilities available, the simpler the form of tools used should be (Lewis & Allan, 2005) and thus analogically the form of the exercises used.

The combination of discussion board and online meetings seemed to be a good teaching strategy in this case. This combination provided the students with an opportunity to meet online and work on exercises. Furthermore, the students had the flexibility to be free to log in only to complete the exercises anytime at their convenience without needing to meet with the instructor virtually when they thought they could work out the exercises without the instructor's help.

Despite the strategy chosen, the use of the computer, e-mail, and *Tapped In* provided the students with new experiences. The experiences drove the students to learn more than the contents/exercises they had to complete, learning to work with new technologies in new learning environments.

Implication on Instruction

In a situation where the IT infrastructure is very limited, a combination of the use of online activities with f2f instruction is a good choice. The online activities can be made less frequent compared to the f2f instruction, in order to counterbalance the cost of the connection which in the current study was predominantly at the students' own expenses, furthering the burden on them.

Virtual learning environments have to potential to allow students identify the major problems they are facing, and at the same time find out how much progress they have made. In addition to this, however, support for solving problems should also be available for the students, in the form of accessible contact with the instructor in a frequent way. Lack of provision of this facility has the potential to lead to higher attrition rates as a result of stress

caused by completing the online activities. This is particularly relevant to students with lower computer literacy, as was also evidenced in the present study.

Conclusion

The use of online exercises can provide students with opportunities for new learning experiences not only for language learning, but also experiences which can increase their skills with computers and the Internet for learning and non-learning purposes. The use of online exercises contributed to increased student participation, and students indicated a positive attitude toward the use of the computer and the *Tapped In* system for instruction. Providing students with opportunities to work on exercises at different times enabled them to take responsibility for their own time in completing the online activities.

There were also important implications that could be reached from the current study in terms of availability of resources and design of instruction. First and foremost, there is a clear need for the development of free Internet-based virtual learning environments with simplified interfaces and a reduced demand on bandwidth for environments where the only available Internet connection is less than 36 KB/second. Many of the currently available tools tend to take for granted that students will have access to faster Internet connections, and many of these cannot function correctly. Secondly, the current study also demonstrated the need for reflection on an environment can lead to improvement. As the targets set in the first cycle were not reached, a rethink of the way in which the existing tools could be implemented to suit the environment enabled a successful outcome in the second cycle. To this end, there is a need to examine what tools are available, what tools are suitable to the environment, and through a process of reflection and revision, how these tools can be best implemented to achieve the desired results.

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teachers also utilize class wikis or discussion boards on Course Management Systems, such as *Blackboard* or *Moodle*. The growing number of public web sites that include user-generated content (UGC) also have great potential as platforms for publishing students' work. As will be discussed in this article, having learners publish a user review on a film web site or edit content on *Wikipedia* could be useful and motivating for many students.

With all the new exciting options for publishing student writing, writing instructors may be confused as to which platform is the most appropriate for their particular student population or a particular learning objective. One essential factor to consider is the potential audience of the various platforms. A main advantage of publishing on the web, which instructors often convey to students, is the potential for a wide worldwide audience (Lowe & Smith, 2000; Federman, 2004; Williams, 2004). However, though writing for an audience increases authenticity and may lead to more motivation, teachers are sometimes very protective of their students' writing. Language learners might experience backlash because of their lack of proficiency or because they may have "different" viewpoints. On blogs or discussion boards, there could be negative comments, wiki contributions could be deleted, and user review may be rated negatively. All could seriously discourage students.

Are L2 learners ready for a worldwide audience, such as they might encounter on *Wikipedia*? The researcher posted a question on *Wikipedia*'s online "help desk" asking whether a certain level of language proficiency was necessary before contributing. However, the replies by two "Wikipedians" were reassuring. "Bjellaklagn" wrote, "Everyone is welcome, but please be aware that articles may be deleted..." "Ssep" soon added, "There is no policy on minimal proficiency. As long as it is understandable and has good content it should be fine, other users can improve the English" (28 May 2007). Therefore, as long as students realize that their wiki can be edited or even deleted, contributions by language learners are welcome by many Wikipedians.

Moreover, a "wikiProject" to counter bias suggests that not only are language learner contributions welcome, but they are sought. According to the site (en.wikipedia.org/wiki/Wikipedia:WikiProject_Countering_systemic_bias), *Wikipedia* aims to have balanced perspective, but most contributors of *Wikipedia* are white, educated males. Authors of the page pleaded users to:

Change the demographic of Wikipedia.... If you are at a university, contact a professor in minority or women's studies... and ask if they would be willing to encourage students to write for Wikipedia. Contact minority or immigrant groups in your area to see if they would be interested in encouraging their members to contribute. (retrieved May 27, 2007)

Therefore, according to this WikiProject, since language learners have different perspectives as the average "Wikipedians", having them edit sites does not ruin *Wikipedia*, but actually helps the site become more balanced. Unfortunately, not all web users have the liberal ideals of *Wikipedia* editors.

Despite the importance of understanding the potential audience of learners' work on the web, instructors often have no idea as to how public, or how private, a site actually is. For example, many instructors and researchers claim that student blogs may have a worldwide audience (Godwin-Jones, 2003; Lowe & Williams, 2004; Suzuki, 2004). However, experience suggests that few users other than classmates or spammers actually visit student blogs.

If this is indeed the case, blogging would hardly give students an influential public voice on the web as is claimed, but would rather be providing a relatively sheltered forum for the students to practice fluency and self-expression. On the other hand, having students publish on content-specific sites with UGC may be less sheltered and could provide students a true meaning voice on the Internet. However, most writing teachers have yet to utilize sites with UGC in advanced writing classes, and studies have not examined the potential audience of such sites. Indeed, it is important to know how many users are viewing a students' contribution in order to select the most ideal platform for a particular class or learning objective.

This paper evaluates web users' responses to students' work on personal blogs and public sites with UGC, including *Wikipedia* and web sites with user reviews, to determine the potential audience of each of the platforms. The objective of this study is to determine which web platform is ideal for a particular student group or learning objective, by considering the following:

- How public is each platform?
- Are contributions by limited-proficiency users of English welcome and "useful"?

Study

To analyze the audience of students' work on various web platforms, the researcher examined comments on a student's blog, the edits or deletion to a students' wiki contributions on *Wikipedia* or *Wikitravel*, and the ratings on students' user reviews on sites such as like *movies.com*.

Participants

Forty students at all grades at Ferris Women's University in Yokohama signed up for the elective course entitled Internet English. A needs analysis at the beginning of the semester determined that the students had various web backgrounds. Most stated that they had some experience searching the web in English, but only a few had created a blog and none had experience publishing on public sites with UGC. The students also had various levels of proficiency, though the majority had TOEFL scores from 430-480.

The course

The main objective of the course was to improve students' ability to communicate on the web, which included developing both their web skills and their language ability. The students created personal blogs and were instructed to write one post a week on a topic of their choice outside of class. In-class work was broken down into student selected topic-based units (movies, music, and travel), with each unit starting with web-based vocabulary, reading, and listening activities. After building their language around the topic and becoming familiar with various web sites, the units concluded by having students publish their writing on a site with UGC.

The movie unit concluded with a project in which students wrote a film review and posted it on either *movies.com* or *imdb.com*. They wrote a brief plot summary and then gave

their opinion of the movie the second paragraph. Figure 1 shows a portion of one student's contribution, errors included, published on imdb.com/title/tt0410297/usercomments-415.

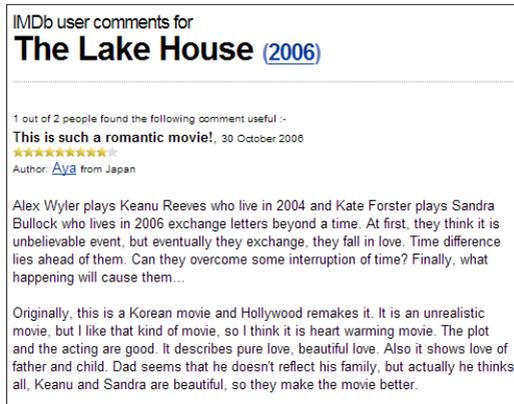


Figure 1. Example of a student's user review published on *imdb.com*

For the music unit, the students were to describe a Japanese musician on the popular online encyclopedia *Wikipedia*. They added new information on an existing page or started a new page if there was no existing site for the musical artist of their choice. One student started a new *Wikipedia* page for the group Ego-Wrappin':

EGO-WRAPPIN' formed in Oosaka, Japan in 1996. Yoshie Nakano is the vocalist. She has a deep and soulful voice. She writes a song and also composes the music. Masaki Mori is the guitarist of the group. He composes the music either. They created new music genre in Japan. It is Japanese pop music, but they are not prepossessed with an ordinary genre. They can be rock, jazz or reggae. It is EGO style. (en.wikipedia.org/wikilego-wrappin , retrieved November 23, 2006)

For the travel unit, the students were given the choice of describing a destination on *Wikitravel.com*, writing a review a hotel, airline, or destination on *tripadvisor.com*, or giving advice to Japan-bound travelers on the *tripadvisor.com* forum. Figure 2 shows an example of a hotel review written by an advanced student.

Data Analysis

All the data were collected in November and December 2006 and analyzed six months later in May and June of 2007. Though each student completed at least 13 blog posts, only the final November post of each of the 40 students was analyzed. The students completed 48 wikis in November, with 33 students completing their music assignment on *Wikipedia* and 15 choosing the option to write on *Wikitravel* for the travel unit. The students completed 38 user reviews: 30 on *imdb.com*, three on *movies.com*, and five on *tripadvisor.com*.



Figure 2. Example of one student's user review on *tripadvisor.com*

User responses to the students' work were analyzed for quantity and quality. The former was done by tallying the number of times users outside of class posted comments on the students' blogs, the number of edits or deletions on a site including a students' wiki contribution, and the number of times a student's user review was rated (as useful or not). User ratings to submitted reviews are displayed above the review on each of the sites, as shown in figure 1. The number of times a wiki has been edited was determined by locating the wiki version that the students edited. This can be found by clicking on a page's history tab. The number of edits compared to the current version of the wiki is displayed, as in figure III ("13 intermediate revisions not shown").

The perceived quality of the students' blogs by users outside of the class was determined by analyzing whether the user comment was positive, neutral, or negative. The quality of the student reviews was examined by checking whether the reviews were rated as useful or not useful. For example, Figure 1 shows that one of two users found the student's review to be useful. The wiki pages the students edited were compared with the current versions of the pages and rated as unedited (or slightly edited) or severely edited (or deleted). In addition, the language use in the wikis was analyzed to see if it was unedited (or slightly edited) or totally rewritten. The example in Figure 3, with the edited words shown in red text, reveals that one student's contribution was nearly totally rewritten, though the content remained.

Results

Number of Responses

As expected, there were no comments from users outside the class on any of the students' blog posts. There were only comments from other students in the class, as the students

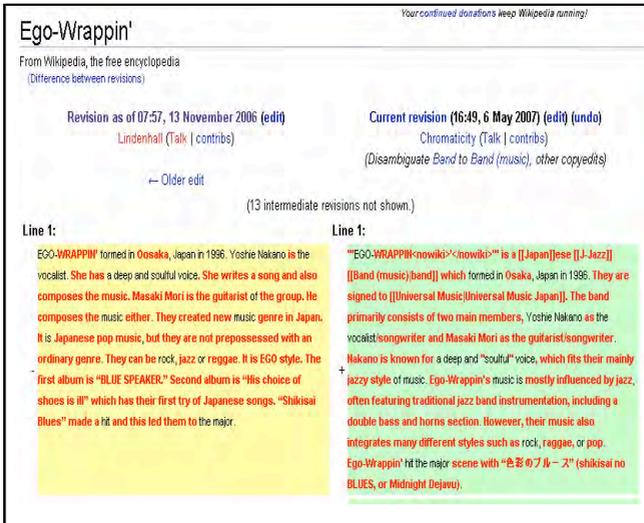


Figure 3

were assigned to read and comment on each others' blogs.

There were user responses to students' written work on *Wikipedia* and *Wikitravel*. After a student contributed to a page on *Wikipedia*, there was an average of 27.09 more edits to the page six months later. The range was from 4 edits to 160, depending on the popularity of the page. There were fewer edits, 8.06 (ranging from 0 to 23), on pages with student submissions on *Wikitravel*. The average number of edits for both wiki sites was 20.88.

There were also responses to students' user reviews. For students' movie reviews on *imdb.com*, there were 35 user ratings for 30 student reviews. While one student received eight ratings and another seven, fourteen of the reviews had no user ratings. *movies.com* seemed to have fewer readers, with 0 ratings for 3 student reviews. For the five students' *tripadvisor.com* reviews, there were 16 ratings. Each review had between two to four ratings. For all sites, there was an average of 1.34 ratings per user review (51 ratings for 38 student reviews).

Quality of Responses

The students' work on *Wikipedia* was often edited. In terms of content, 42% of the submissions were deleted or mostly deleted. In terms of the students' language use, 52% of the contributions were totally or mostly rewritten. The three students' whose pages were edited over 100 times all had their data completely deleted. The students' submissions on *WikiTravel* were edited to a lesser degree. Ninety-three percent of the students' submissions had both their content and language kept. Totaling the data for both wiki sites, 69% of the contributions' content was kept and 63% of the students had their language use unedited or only slightly edited.

In terms of the students' user reviews, 32 of 51 (63%) of the ratings were rated as useful. For *imdb.com*, 19 of 35 were rated usefully, and 13 of 16 the ratings on *tripadvisor.com* were useful. Three student reviews were rated positively 4 of 4 times, while one review was rated as not useful all four times.

Table I summarizes the findings of the study. There were the most responses (edits) to the students' wiki contributions, and there were some responses to their user reviews. Blogs received no responses by users outside of the class. Most of the students' contributions on both the wiki sites and the sites with user reviews seemed to be viewed as constructive.

Table I. The quantity and quality of user responses to students' published work

Platform	Number of Responses	"Positive" Responses
Blogs	0.00 comments	-
Wikis	20.88 edits	69% of content kept
User Reviews	1.34 ratings	63% rated usefully

Discussion

It is impossible to know exactly how many users outside of the class were accessing the students' contributions since none of these sites examined in this study included page counters. However, this study can provide a very rough estimate as to the potential audience of the students' work on each of the platforms. A brief analysis of *YouTube.com*, which releases data showing the number views, user ratings, and comments, reveals that the number of comments and ratings are comparable, and that there tend to be hundreds of comments and hundreds ratings for each view. Therefore, it is possible that the students' user reviews, which received 1.34 ratings on average, were viewed perhaps hundreds of times. On the other hand, there was no evidence of users outside of class viewing the student blogs. There were no comments on the blogs, and there were likely very few, if any, views. *Wikipedia* or *Wikitravel* pages edited by students were edited about 20 times on average, and were likely viewed many times more. Overall, instructors' can be fairly confident that, compared to blog publishing, having students' publish on content-specific sites with UGC provides students with a larger audience. Moreover, the fact that roughly two-thirds of the students' submissions received a "positive" response indicates that even intermediate language learners have a welcome place on the worldwide web, if they put forth their best effort.

Student opinions

The students were very enthusiastic about the course, including blogging and publishing on sites with UGC. A survey administered after the research project revealed that blogs were still the most popular platform on average. On a five-point Likert scale, blogs received 4.74 in terms of being useful and/or interesting. Wikis received 4.19, and the average for user

reviews was 4.33. This reinforces the idea that, while all of the projects were popular, blogs are the most risk-free and useful for nearly everyone. As mentioned above, the class consisted of students of various proficiency levels. Since some students, especially lower-level students, had their work deleted, it is clear that sites with UGC are not ideal for lower-level students, as mentioned above.

However, for certain higher-level students, these projects were the most motivating. Three people wrote a post-project reflection that the movie review project was the best, with one stating that she was "so excited when my first review was uploaded on [imdb.com]." It was evident that many students felt motivated to publish on a popular website. Students who added reviews on the *tripadvisor.com* site seemed to feel that their writing was especially useful. One student wrote, "I hope my review will help people who want to know about this hotel." Clearly, the student saw that her review could be meaningful and influential.

There were similar comments about wikis. One student stated that "I made my hometown page by *Wikitravel*. I wanna increase more infomation [sic] from now!" Another wrote, "My favorite thing... is Music project which I wrote a part of *Wikipedia* [sic]. When my sentences run in *Wikipedia*, I was pleased." Like with the user reviews, these students' were motivated that their work was published on such popular a web site, and they felt their writing had a purpose to inform others.

Meanwhile, student comments about blogs were different. The students wrote that writing on the blog felt easier and that they liked communicating with others in the class. One students' comment seemed capture the essence of blogging:

When I wrote... in the blog, I felt really excited. I had no idea to write in English is easy [sic] :) funfunfun!! I felt free from the wrong spelling or difficult grammers [sic], because this is MY blog!! Haha. ("Snory Nory Story")

While publishing on sites with UGC often motivated students to put forth their strongest effort, blogs seemed to promote fluency and community. The major reason for this was likely that the sites with UGC had an audience, while the blogs were apparently not viewed by anyone outside of the class.

Implications

Blogs have various uses in writing courses (see Lowe & Williams, 2004). However, since this study shows that they are not likely viewed by others outside of the class, instructors should not give students the idea that their blogs will be viewed by a "worldwide audience". Because blogs provide a relatively sheltered environment, blogging gives students the opportunity to develop their fluency (Fellner & Apple, 2006). Considering they are not likely to be viewed outside the inner-circle (and can be made private by changing the privacy settings), blogs are particularly good for low and intermediate learners.

As this study shows, publishing on public sites with UGC may be more meaningful than blogging and could lead to a larger audience. Therefore, they can be particularly motivating for intermediate or advanced students. *Wikipedia* and its related sites are ideal for practicing objective writing. Since lower-level students will likely have their work deleted, contribut-

ing to public wikis is not ideal for them. To lessen the chances students will have their work deleted and to ensure they will have something to add, the instructor should have students choose a topic which students know a lot about and whose page does not have much information yet. In the study, Wikipedians more often scrutinized the content of very popular pages or totally new pages. Therefore, having students choose an existing page with limited information is ideal. Choosing a topic from the students' country, such as a semi-famous musician, actor, or athlete, would provide many welcome opportunities. *Wikitravel* provides more chances since it is still under development and since students may have a lot of knowledge about their hometown. Other Wiki sites, including *Simple English Wikipedia* and *Wikihow*, provide even more opportunities for students.

User reviews also had an audience and were meaningful for intermediate and advanced students. Students can write a review on a lot of topics of interest, including movies (*imdb.com*), a destination, airline, restaurant, or hotel (*tripadvisor.com*), and music (*sputnikmusic.com*). Since most sites with user reviews do not allow users to comment or delete on other users' reviews, there is little risk. However, being rated as not useful could be discouraging. To ensure good writing and a favorable rating by other users, instructors should have students study other reviews to learn the vocabulary and to learn how to write objective summaries and subjective opinion paragraphs. Editing a draft or having other students peer review, which was not done in this study, would also help.

Limitations

Educators need to be careful making firm conclusions from this action research study. Although the responses to three platforms were compared, the responses were of such different types that testing the difference validly is not possible. In addition, the participants in the three variables were not equally or randomly distributed. While all users completed a blog, some students either did not or were not able to publish a wiki. These were often lower-level students who were more likely would have had their work deleted, if they had published.

Conclusions

Blogs, public wiki sites, and sites with user reviews all provide students a platform for publishing their work. However, an analysis of user responses to students' work shows that each project could serve a specific purpose. Blogs may be best for practicing fluency and building community since they have a smaller audience (and could be made private by changing the privacy settings). On the other hand, having students publish on popular sites with UGC provides students a larger audience and a more meaningful voice. *Wikipedia* or other public wiki sites and sites with user reviews offer intermediate and advanced students a meaningful platform to publish their writing. This study shows that their contributions are welcome, constructive, and accessed by web users outside of the class.

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Investigating the use of social networking services in Japanese EFL classrooms

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In this study, we investigated 92 university students' perceptions toward the use of social networking services (SNS) in English classes based through a survey consisting of 30 items based on Warschauer (1996). Participants enrolled in three EFL courses offered at two universities responded to the questionnaire after they completed a one-semester course which included blog assignments on a SNS. Thirty items of the questionnaire were factor analyzed and three factors were extracted: (a) Communication and Empowerment through the Use of Computers, (b) Recognition of the Value of Computers, (c) Reluctance to Use Computers. Based on the results of the factor analysis and additional comments provided by students, various aspects of pedagogical practice and research in the use of SNS in English classes are discussed.

Introduction

These days, many researchers have pointed out the potential of incorporating computers in the English language classroom (Cooper & Selfe, 1990; Sullivan 1993; Kern, 1995; Sullivan & Pratt, 1996; Warschauer, 1996, 2000; Lam 2000, 2003, 2006; Matsuda, 2001; Roed, 2003; Absalom & Marden, 2004; Fotos, 2004; Ward, 2004; Pinkman, 2005).

Pedagogic uses of computers in the English language classroom have included computer-assisted classroom discussion (CACD), e-mail exchanges, web-page authoring, and synchronous written exchanges, to name but a few.

Computer-assisted classroom discussion (CACD) helps learners to negotiate meaning in the target language, and encourages them to re-construct and re-think existing social structures and visions (Cooper & Selfe, 1990). It also helps to increase students' participation and collaboration (Sullivan, 1993; Kern, 1995; Sullivan & Pratt, 1996; Braine, 1997), boost students' writing complexity (Kern, 1995), reduce apprehension toward writing (Sullivan, 1993; Sullivan & Pratt, 1996) and raise the quality of performance (Sullivan & Pratt, 1996). After many schools and universities began to introduce local-area networked computer systems into their schools, learners have been provided with many chances to: (1) revise or edit their drafts with feedback from peers or teachers after finishing their work or while revising or editing (Hyland, 2000); (2) expand opportunities for such feedback from peers or teachers (Braine, 1997); (3) gain an increased awareness of their own writing processes (Nystrand & Brandt, 1989); and (4) allow for learners to control their discourse by participating in text interactions or discussions (Braine, 1997; Hyland, 2002). It is also argued that the use of computer networking helps learners to accomplish their writing tasks more easily than with pen and paper.

E-mail exchanges in second language learning can help the learning process to be more learner-centered, encourage students to share their ideas, enable them to revise and edit their writing, expand the opportunities for tutoring and collaborative work, increase the quality of writing, and motivate students (Warschauer, 1996; Absalom & Marden, 2004; Fotos, 2004). Of these researchers, Absalom and Marden (2004) have discussed the importance of using e-mail as a way to offer learners chances to interact with each other using their target language in an environment where students share the same LI. Furthermore, they emphasized the effectiveness of e-mail as a tool to encourage shy or quiet students to interact more with their classmates.

In a study conducted in Hawaii, Warschauer (1996) revealed several motivating factors for the use of computers in English classes. He found that a wide range of students have a positive attitude toward using computers for writing and communication in the language classroom, and that gender or the possession of computer skills did not have an effect on the outcomes. In terms of proficiency gains, Fotos (2004) conducted a pretest and posttest to examine score gains in English proficiency, finding that average gains in the post test scores of the scores found in the post test scores of students in a class using e-mail were higher than that of ones in a traditional reading class.

In respect to research on *Web-page authoring*, Warschauer (2000) considered the following factors to be necessary in order to make web-page authoring activities successful: (1) students must understand the purpose, (2) students must find the purpose to be socially or culturally relevant, (3) the electronic medium must be appropriate for achieving the purpose, and (4) students should be encouraged and enabled to use medium-appropriate rhetorical features to fulfill the purpose.

Several researchers have pointed out how student created web pages reflect the sociocultural context around them. The students, teachers, institutions and communities surround them influences their writing (Warschauer, 2000; Matsuda, 2001; Lam, 2006). For instance, Matsuda (2001) discussed the complex characteristics of voice in online writing, showing how Japanese bloggers drew from a wide range of discourse practices in shaping and expressing their on-line voice. Lam (2006) investigated an ESL students' production of

a website outside the classroom. She described the precise process that the student went through, where a student who struggled with academic English at school first, managed to obtain a new identity by using alternate styles of English at school through creating his website. While students may struggle in writing for global communities beyond their local communities, assigning students to make their own web pages may help some students to transform.

As for research into *synchronous communication*, Lam (2000, 2003, 2006) investigated the process of an ESL student's participation in a chat site outside of class, and found that the emergence of a new style of writing paralleled the development of a new identity. Although this student was quiet and shy in the classroom, Lam found that he appeared to be confident in communicating with others on-line. In other words, his identity gradually evolved through writing, which was influenced by the social and political context, illustrating the process of how one learner struggled with such contexts to create a unique identity.

Regarding research on the use of blogs into L2 instruction, Ward (2004) gives an account of the history of blogs and discusses several advantages of incorporating blogs into L2 instruction. For example, he noted that authors do not need to have technical skills as they are required in home page writing; they can send messages to people around the world without being intrusive; and readers can post comments for the author easily, which facilitates interaction. As they obtain frequent comments from readers using the commenting function, authors may recognize the existence of readers and continue to enjoy blogging without a great deal of anxiety about how they should express themselves. Ward also comments about the ambiguity of blogs due to their public expression of what has traditionally been allowed limited access, journal writing. Blogs are motivated by self-expression, but oriented toward collective work and networking. The recursive nature of learners' (bloggers') voices emerge from blogging. At the same time, Ward argues that the disadvantage of blogs in L2 instruction is the danger that students will indulge in superficial reading and slippery writing. Among the comments in the questionnaire obtained from his students, Ward found that students believe blogging improved their English, while at the same time they enjoyed interacting with their families and friends, and showed pride in what they created on their blogs. Students seemed to increase their willingness to keep blogging.

Pinkman (2005) also suggested that blogs may enable learners to communicate with others using computers. Though she shows that the learners have positive attitudes toward blogging from interviews and a questionnaire, she acknowledges the fact that only two learners were still blogging after the instruction. She speculated that the cause was a lack of regular feedback (i.e., comments) from classmates. Thus, the commenting function seems to be an important factor in motivating learners to keep on blogging outside the classroom and after the instruction ceases.

As a tool that incorporates many of the features of these aspects of CALL for English language learning described above, *Social Networking Services* (SNS) have gained in popularity in recent years, not only in the U.S and Europe, but also in Japan. In particular, blog functions have prevailed because SNS allow participants to make their own profiles and provides a daily diary open to the public so that they can expand and deepen their connections with others. The number of people using the most popular SNS in Japan ("Mixi") has topped eight million (Mixi, 2007). Despite its popularity, few researchers in our field have

conducted studies using the service, or investigated how we can incorporate this service into a course. In order to understand the possibilities for motivating students to use their target language on SNS, research is required.

Thus, we decided to investigate some aspects of the participants' perceptions of SNS and clarify the nature of students' underlying motivation for writing blogs. We will speculate on effective ways to incorporate the use of blogs in Social Networking Services in the English classroom at Japanese universities.

Research Questions

This study aims to identify forces that may drive students to learn English using blogs in Social Networking Services, and record their reactions to the practice of the use of SNS in their English classes. Thus, we posited the following research questions for this study:

- What are the underlying learners' motivational characteristics towards SNS?
- How did participants react to the practice of using SNS in their English classes?

Method

Participants

Ninety-two university students were surveyed in three EFL courses offered in two Japanese universities. All classes aimed at improving students' overall English and were taught by the same teacher. Because the Social Networking Service used in the study is an invite-only network, the students were registered in the social networking services (Windows Live Space), and invited by the teacher at the beginning of the course. All the classes involved the use of blogs in the SNS to communicate with other students inside and outside of class. As regular assignments, students were asked to search for certain information (e.g., about a foreign city or the musician that they liked) and post what they had found in their blog. They were encouraged to find somebody in the SNS with whom they could communicate in English.

Materials

The questionnaire used in this study is mostly based on Warschauer (1996), who used it to examine learners' motivation toward using computers in second language writing classrooms in the U.S., Hong-Kong and Taiwan. Because this study concerns only Japanese students, and the aim of the research mainly is to examine the motivation toward blog writing on the SNS services, some items were reworded. One researcher translated items written in English first and the translation was checked by several Japanese native speakers. It consisted of three parts featuring: 1) general background questions such as gender and major; 2) questions concerning the frequency of computer use, such as how often students exchange e-mail, use word processors, and browse homepages, and how often they use a personal computer a day, and; 3) 30 items arranged in a 5-point Likert scale, ranging from strongly agree (1 point) to strongly disagree (5 points) to statements about their motivation for using computers in blog writing in the second language classroom (see the Appendix for the descriptive statistics for the 30 questionnaire items). At the end of the questionnaire, a

space was provided so that learners could write down freely their thoughts on the positive/negative aspects of using computers in English classes.

Procedure and Analysis

The teacher asked participants to access a website to respond to the survey in the three classes at the end of the fall semester 2006 (around the end of January 2007). The survey questions were in Japanese so that the students could sufficiently understand the content of the questionnaire.

Items 2, 5, 8, 10, 21, 26, 29, and 30 were reverse coded. Descriptive statistics were computed for all the questionnaire items to eliminate skewed items. The data were then analyzed using the procedure below. A principal axis factor analysis using a direct oblimin rotation procedure was performed on the 30 questionnaire items in order to determine the underlying characteristics of motivation for writing a blog among the participants. Based on the scree plot and the interpretability of the factor solution, a three factor solution was used in this study. Finally, comments students wrote at the end of questionnaire were analyzed to clarify in more detail.

In the analysis of the questionnaire, the mean and standard deviations for the 30 items were checked initially. Four items were negatively skewed. Thus, these four skewed items were excluded from further analysis: item 3 (I am not afraid of my mistakes in my essay being pointed out by a teacher), item 4 (I am not afraid of my mistakes in my essay being pointed out by a friend.), item 15 (Using the Internet is a good way to learn more about different people and cultures.), and item 24 (Learning how to use computers is important for my career.). Statistical analyses were conducted using SPSS 14.0 (2005). Cronbach alpha statistics were computed for the 26 remaining questionnaire items and a reliability of .847 was obtained.

Results

Underlying characteristics of motivation toward SNS

A principal axis factor analysis using a direct oblimin rotation procedure to see how the 26 items grouped together with 3 factor solutions. Three factors were extracted with an item loading greater than .45 as the criterion of salience. The factors accounted for 46.21% of the variance in the 26 items.

As indicated in Table 1, Factor 1 received appreciable loadings from the 16 items, the largest component of blog writing motivation for this sample. As shown in Table 1, the variables for this factor were quite diverse. For instance, five items (6, 7, 9, 12 and 14) were directly related to commitment to communicate, and two items (13 and 18) were relevant to self expression. Item 11 and 16 relate to learning interactively with other learners, while items 19 and 28 related to learning interactively with authentic texts or tasks. This factor is named *Communication and empowerment through the use of computers* since the items loaded on this factor support the use of computers to facilitate communication between learners both inside and outside the class. Overall, this factor relates to an affirmative orientation toward using computers communicatively.

Table 1. Results of Factor Analysis for All Subjects (N=92)

No	Items	F1	F2	F3
Factor 1: Communication and empowerment through the use of computers				
11	Using blogs and social networking services help people learn from each other.	.724		
18	Writing by computer makes me more creative.	.711		
7	I enjoy using the Internet to communicate with people inside class.	.710		
9	I enjoy using the computer to communicate with my teacher.	.705		
17	Learning to use a computer gives me a feeling of accomplishment.	.697		
6	I enjoy using the Internet to communicate with people outside class.	.685		
23	I enjoy the challenge of using computers.	.680		
14	Using blogs and SNS makes me feel part of a community.	.675		
19	Using a computer gives me more chances to read and use authentic English.	.657		
13	Blogs and social networking service help me develop my thoughts and ideas.	.631		
16	Communicating using a blog or a social networking service is a good way to improve my English.	.611		
12	An advantage of blogs and SNS is you can contact people any time you want.	.593		
28	Using a computer gives me more chances to practice English.	.592		
22	Using a computer gives me more control over my learning	.589		
20	I want to continue using a computer in my English classes.	.504		
27	I can learn English faster when I use a computer.	.466		
Factor 2: Appreciation of computers				
21	Using a computer is not worth the time and effort.		.721	
2*	Revising my papers is a lot easier when I write them on computer.		.695	
29*	Computers are usually very frustrating to work with.		.680	
5*	Writing papers by hand saves time compared to by computer		-.656	
Factor 3: Reluctance to use computers				
23	I enjoy the challenge of using computers.			-.478
1	I can write better essays when I do them on computer.			-.693
27	I can learn English faster when I use a computer.			-.515
30*	Computers make people weak and powerless.			.506
Eigenvalue		7.25	2.84	1.93
Percentage of variance		27.87	10.93	7.41
Cumulative Percentage of Total Variance		27.87	38.80	46.21

Note. Items with asterisks (2, 5, 8, 10, 21, 26, 29, and 30) are reverse-coded items.

Factor 2 received loadings from four items (2, 5, 21, and 29), all of which relate to the handiness of computers. Note that items with asterisks were reverse coded. Among those items reversely coded (2, 5, and 29) on this factor, item 5 was reversely loaded. It probably means that some respondents actually believe that writing papers by hand saves time compared to by computers. Our interpretation of this mixed factor loading is that participants see that the use of computers in English classes is useful although they recognize that it may be easier to write papers by hand.

Factor 3 received loadings from four items (1, 23, 27, and 30). Note that two items (23 and 27) loaded positively on the factor 1 was loaded negatively on this factor. This factor also includes item 30, which is reversely coded. Even though we found these complex loadings, we interpret it as indicating that some participants are reluctant to use computers in English classes. This factor relates to negative feelings about the challenge of using computers (item 1), the ease of writing and learning on computers (items 23 and 27), and learning enhancement which is facilitated by computers (item 30). We named this factor *Reluctance to use computers*.

Participants' reactions to the practice of using SNS in their English classes

Among the 92 students who responded to the questionnaire, 62 students (67%) wrote positive comments about the use of SNS in their English classes, and 56 students (61%) also wrote some negative comments about the use of SNS. In this section, we include some of the representative comments for the basis of later discussion. Five themes emerged in the analysis of the qualitative data. They included appreciation of having the opportunity to type in English, the commenting function of the blog, increased opportunities by virtue of being assigned to write blogs, and negative feelings towards blog assignments and the use of computers in English classes.

Appreciation of having the opportunity to type in English. Several participants stated that they were happy to have the chance provided to type in English, which they normally do not get to do without being assigned it. Other participants commented that it was easier for them to notice their mistakes. Three examples of the statements in this category are:

By typing a lot of English, it helped me remember the English that I was forgetting.

I don't normally write English on the computer but by writing the blog, I got used to typing English on the computer.

It was good that I started to be able to type in English. Moreover, I can view the whole writing so it made it easier for me to notice the mistakes I had made.

Appreciation of the commenting function of the blog. We also noted that some students found the commenting function useful for them to get to know people in the community. One student even commented that this practice may be helpful for overcoming an aversion to English.

I felt that it was good since we were able to comment on other people's blogs. I made friends by leaving comments. In this way, I think it will become popular among students and I think it will make students overcome their dislike of English.

By using the blog and presentations, I needed to state my opinion or comment to people who I had no acquaintance. It made me think about how to say and express my words.

Appreciation of increased opportunities through blog writing assignments. Many students commented on the usefulness of the classroom practice of having students write blogs often, making comments to others, and collecting information from the Internet for final presentations. One student even wrote that she was touched to know that she could make friends all over the world using SNS.

I was able to become friends with students from other schools.

By doing the blog, I think I became more faster at writing compositions in English.

With the blog assignment, there were more opportunities to read in English.

By writing the blog, it made me realize clearly about how much I can express myself using English. It was interesting to study cultures of countries on Wikipedia and the Internet.

By using the blog I was able to look at my friend's opinion and English writing. I was surprised to find out how good my classmates are with computer skills when everybody made presentations.

It's good to write diaries every day. Thanks to this class, I learned about blogs and Windows Messenger. Moreover, I got to understand a lot of vocabulary and how to write sentences. By writing the blog, I was able to experience intercultural exchange and got to know things I didn't know before and knowledge about social matters. And I was touched by the fact that I was able to make friends not just around me but friends from around the world.

Negative feeling towards blog assignments. However, the blog assignments were also perceived negatively by some students. Four students wrote specifically that their eyes got tired because they needed to spend a considerable amount of time looking at the computer screen. One student made the constructive comment that assignments with pen and paper may be preferable to deal with this issue.

Blog. I wish there weren't any blog assignments. They weren't popularized by my classmates and I wanted it to be more widely-used. I felt that the blog was completely an 'assignment'.

It was tough writing the blog in English every time.

There was too much homework using the computer. It made my eyes hurt and I started to feel confused with spelling when I actually had to write. I wanted the homework to be equally divided with handwritten homework and assignments with computers.

It was my first time to write blogs so I didn't know how and what to write. It's a fact that there had to be some kind of event or incident so that I could write on the blog. There was also a fact that I was slow at writing English so it took me 2 hours to write one blog. BUT, it made me think that I had to study more!

Negative feeling towards the use of computers in English classes. Several students were critical toward the use of computers in English classes. It is quite true that the pace of progress depends largely on their computer skills, not their English skills. As pointed out in the second comment, teachers need to be careful about assisting their students in their computer use. In particular, computer novice students need extra attention.

When using the computer, there were differences in the pace of progress according to one's computer skills.

I think it is important to explain carefully to people who aren't good at using the computer.

Discussion

This study attempted to identify the underlying characteristics of motivation toward writing a blog on SNS in the English classroom. In this section, students' comments provided at the end of the questionnaire were used to analyze the characteristics which emerged in factor analysis in more detail.

The largest observed factor of blog writing motivation loaded in the factor analysis clearly related to *communication*. In fact, there were many students who wrote positive comments about the course where students could communicate with each other in the course. For example, some learners commented that "the chances of conversation with classmates increased," "I was moved by the fact that I could make friends around the world using a blog and social networking service," and "I was able to have opportunities to get in touch with learners outside my class." Some students expressed their urge to cultivate their communication skills more in their future. Such comments as "Learning to use a computer gives me a feeling of accomplishment," "Writing by computer makes me more creative," and "I enjoy the challenge of using computers" confirms the students' communication oriented nature. Though anxiety tends to impede language learning, especially in listening and speaking tasks (Horwitz, Horwitz, & Cope, 1986), blogging has the possibility to lessen the anxiety to communicate, and facilitate interaction among learners as research on e-mail in second language instruction has shown (Warschauer, 1996; Absalom & Marden, 2004; Fotos, 2004).

Interestingly, Fotos (2004) pointed out that many students feel e-mail writing is similar to talking. Absalom and Marden (2004) also discussed the potential for e-mail exchange to be transferable to students' speaking proficiency. One student in this study also commented

that, "blogging is easier than writing". In her mind, blogging seems somewhat different from other forms of writing as it provides a way for expressing her feelings. We found that blog writing in the SNS facilitates dynamic communication with a variety of people outside the classroom, while it makes many learners feel that they belong to an online community consisting of a variety of members. Though precise analysis of this factor is beyond the scope of this paper, this motivating characteristic may indicate the possibility of enhancement of online "community of practice" (Wenger, 1998) where students learn meaningful things and shape their knowledge, style and their own writing skills through communication with a variety of members within a certain community on the Internet.

Many students made comments on the efficacy of learning English through contact with other learners, authentic texts, and language learning tasks which is related to factor 2. Some students wrote comments such as "Because I often visit a variety of sites on the Internet, I could increase the time spent on reading and listening to English," "The chances of being exposed to English increased," "I was able to understand a variety of places around the world through presentations reported by classmates," and "I was able to read and understand other students' opinions and thoughts by reading blogs." These comments confirm that English learning through interaction with others and with various materials on the Internet certainly occurred and those interactions motivated students to learn English more. This factor indicates that many students, at least in this group, enjoy learning English through authentic exposure to English, writing their own blogs in English, and communicating with others in English, and those conditions stimulate their motivation to learn English in an authentic fashion.

Also, many students commented positively about aspects of the use of computers related to Factor 1, which could lead to *autonomous learning*. For example, some students commented, "I could increase the chances of writing English, searching for information on the Internet, and summarizing the information obtained", "I could speed up my composition writing," and "It was fun to research interesting things and summarize it to report back to class." One student commented that "the way of learning English using a blog made it easier for me to notice my own mistakes in English." Considering the importance of output for learners to notice the gap between what they would like to express and what they can express (Swain 1995; Swain & Lapkin, 1995), free writing activities such as participation on SNS helps students notice their mistakes by themselves, and that leads them to develop autonomy.

Compared to the original study by Warschauer (1996), which extracted three factors (*communication, empowerment, and learning*) from his questionnaire, we found that three different factors emerged in the factor analysis (even though we used the same factor analysis method, a principal component analysis with direct oblimin rotation). It was especially surprising that an unexpected construct which is related to a reluctance to use computers was loaded in the factor analysis.

Conclusion

This research attempted to clarify the motivating factors toward writing blogs on a social networking service among university students who participated in this study in Japan. Although this study has a certain value in classifying the nature of students' motivation, there

are at least two points that should be noted for future research. Though we made the questionnaire based on Warschauer (1996), some of the items may not have worked well for the students in this study as seen by the factor analysis performed. We also think that we should have developed more items concerning other aspects of SNS. We recommend that researchers consider these issues in future research so that they can depict students' motivation factors for SNS in a broader way.

Second, we found that the use of computers in English classes may actually make some students feel demotivated. As seen in Factor 3 loaded in the factor analysis and negative comments provided by the students, some students may resist the use of computers in their English classes. However, we are unsure about this possibility based only on the complex loading on the factor analysis in this study. Future studies which investigate the influence of the use of computers on students' demotivation may help us to understand this issue better, which is worthy of further investigation.

Sheehan (2004) argued that although the Internet provides very rich input, it might prevent learners from stretching their interlanguage without sufficient chances for them to use it. In a course offering well-balanced input and output, where learners write a blog and make class presentations based on what they searched about certain topics, students can stretch their interlanguage effectively. We believe that blogging using SNS has the potential to cultivate students' motivation toward communication, which could be dampened in classrooms focusing mainly on oral communication.

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Appendix

Questionnaire Items Used In This Study and Descriptive Statistics (Original English version).

	Questionnaire Items	Mean	S.D.
1	I can write better essays when I do them on computer.	3.261	0.965
2*	Revising my papers is a lot easier when I write them on computer.	3.174	1.372
3	I am not afraid of my mistakes in my essay being pointed out by a teacher.	4.489	0.773
4	I am not afraid of my mistakes in my essay being pointed out by a friend.	4.413	0.899
5*	Writing papers by hand saves time compared to by computer	3.140	1.299
6	I enjoy using the Internet to communicate with people outside class.	3.554	1.087
7	I enjoy using the Internet to communicate with people inside class.	3.620	1.051
8*	I am more afraid to contact people by e-mail than in persons.	3.011	1.255
9	I enjoy using the computer to communicate with my teacher.	3.630	0.917
10*	If I have a question or comment, I would rather contact my teacher in person than by e-mail.	2.293	1.079
11	Using blogs and social networking services help people learn from each other.	3.685	0.988
12	An advantage of blogs and SNS is you can contact people any time you want.	3.641	1.049
13	Blogs and social networking service helps me develop my thoughts and ideas.	3.685	0.920
14	Using blog and SNS makes me feel part of a community.	3.261	1.092
15	Using the Internet is a good way to learn more about different people and cultures.	4.326	0.874
16	Communicating using a blog or social networking service is a good way to improve my English.	3.728	1.044
17	Learning to use a computer gives me a feeling of accomplishment.	3.141	0.928
18	Writing by computer makes me more creative.	3.087	1.100
19	Using a computer gives me more chances to read and use authentic English.	3.435	1.087
20	I want to continue using a computer in my English classes.	3.620	1.121
21*	Using a computer is not worth the time and effort.	3.891	0.972
22	Using a computer gives me more control over my learning	3.620	1.030
23	I enjoy the challenge of using computers.	3.043	0.943
24	Learning how to use computers is important for my career.	4.587	0.678
25	I can learn English more independently when I use a computer.	3.413	1.065
26*	Computers keep people isolated from each other.	3.065	1.082
27	I can learn English faster when I use a computer.	3.022	0.932
28	Using a computer gives me more chances to practice English.	3.533	1.016
29*	Computers are usually very frustrating to work with.	3.728	1.104
30*	Computers make people weak and powerless.	3.326	1.023

* Reverse coded.

Integration of Moodle Course Management System (CMS) into an EFL Writing Class

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The implementation of Course Management System (CMS) technologies can have a beneficial impact on course organization, lesson implementation, coursework distribution, teacher-student communication and assessment; furthermore, CMS technologies tend to help create a more student-centered learning experience. This article outlines the useful implementation of a CMS into an EFL composition classroom. The author examines how CMS technologies can be woven into an established EFL writing curriculum built upon the constructivist notion of the author as communal learner and communicator. The goal of the article is to demonstrate, through specific examples, particular Moodle CMS features that support activities and approaches inherent in the "process approach" writing class.

Introduction

My interest in CALL is largely driven by my interest to become a more effective EFL teacher; however, I am slightly skeptical when it comes to thinking of technology as a "tool of convenience" – especially in the classroom. Like many teachers, I feel that CALL should be a means, not an end, to EFL instruction. Recently, however, I was given a mandate to meaningfully weave CALL technologies, and more specifically, a Course Management System (CMS), into a writing pedagogy (and syllabus) designed to produce project-based assignments which underscore the transactional and social nature of writing. Traditionally, composition courses tend to be teacher-centered. This teacher-centeredness is often amplified if instructors organize their curriculum by means of a "product approach" where instructors teach to and evaluate from sample, "ideal" texts. Of course the instructor is the final arbiter of correctness and quality; however, without a "process approach" to writing (which requires multiple drafting

and revision work to be conducted within a group of readers) students rarely develop a true sense of audience, nor do they acquire the skills required for creating and shaping their work. In contrast to the “product approach,” the underlying principle of the “process approach” to writing is the constructivist view of author as communal learner and communicator – someone who can work through communal, task-based projects in an effort to express himself more successfully (Murray, 1980). The goal of this article is to give practical suggestions of how a CMS can be effectively integrated into a de-centered EFL composition classroom. The following is an outline of CMS technologies and their applicability to tasks which support the notion of composition as a social and recursive activity.

Theory to practice

The “process approach” to composition instruction evolved from constructivist theory and the work of psychologist Lev Vygotsky (1978), who examined the importance of social interaction on learning. In addition, Piaget’s (1969) cognitive-constructivists view of learners as bound to developmental mental processes has also supported the value of this approach. In the field of composition theory and instruction, Moffett (1992) integrated the ideas of Vygotsky and Piaget in his own theory of discourse genre. In brief, Moffett’s model focuses on the act of writing from the perspective of author (and reader) in relationship to experience, measuring the rhetorical distance at which an author describes, reports, generalizes and/or theorizes about a given situation or event. Much like Piaget’s observations of learning development, Moffett’s model marks the sophistication of language development as writers demonstrate their ability to move from *implicit* to more *explicit* use of language. Moffett’s model is particularly useful in the “process approach” composition classroom as it also sheds important light on how certain sentence features (i.e., tense, register, use of modalities, vocabulary, etc.) shift as rhetorical distance between “speaker, subject and listener” changes.

The utilization of CMS technologies that underscore *for students* the importance of composing both within and for communities of readers should be the first priority for the CALL composition instructor. Moreover, encouraging students to socially mediate meaning in L2 (when possible) while working through the composition and revision processes is also critical to this “process approach.”

Instructional philosophy and approach

This paper suggests approaches for the implementation of a CSM in an L2 English composition course at a college or university level, composed of motivated, adult learners. English proficiency levels should range from high-intermediate to advanced, and the goals of the course should emphasize the understanding of rhetorical forms over syntactical concerns, at least initially. More simply put, teachers should resist the urge to teach form, e.g., the five paragraph essay, and should instead encourage their students to investigate “experience.” To this end, instructors should not address sentence-level concerns until students’ drafts have reached the editing stage. “*Process, not product*” should be the key operating principle. Typically, “process approach” composition courses are taught from “spiraled” syllabi, meaning, over the course of the term, students are asked to engage in various activities

that underscore the notion of composing within a community of readers; specifically, these courses include pre-writing, drafting, peer/teacher response, revision, review and editing activities which create the pathway by which students complete their assignments (Calkins, 1994). Also, often "folded" into this type of curricula in the EFL context are discussions of reader-writer responsibilities across cultures (contrastive rhetoric), typology, and western notions of new knowledge, authorship and plagiarism.

Teaching environment and resources

The integration of a CMS into a writing course can be accomplished in several ways; for example, an instructor may choose to utilize a CMS for their own organizational purposes with no access given to students, or they may give limited access to their students at particular times during the term. However, this paper's suggestions are based on a learning environment which utilizes a CMS within a CALL classroom with "on demand" access given to students. In this CALL design, a group of approximately 15-25 students sit at round tables and work in teams of 3 or 5. Each student has her own networked laptop computer equipped with word processing software. The CMS chosen for this class is a popular open-source solution called, *Moodle*. *Moodle* is a powerful and flexible CMS for managing, presenting and distributing course materials; moreover, its modules help support independent learning by allowing students to access course materials "on demand," thus encouraging reflective and recursive thinking to occur --both skills critical to the writing process. In addition, many of *Moodle's* modules help support the social mediation of learning. *(More in detail in the section on *Moodle* CMS Supported Activities) Teachers will need to be able to display various technologies (e.g., web-based applications, podcasts and mobile blogs) onto a large screen visible to all students, and have access to common software programs, e.g., MSWord and PowerPoint. Finally, a printer is necessary for students to print their drafts during the revision process.

Integration of Moodle into the L2 composition classroom

Moodle courseware will be the repository for course content and can eliminate the need for paper learning materials. All information regarding the organization and operation of the class resides here. The course is broken down into class meetings (weekly or bi weekly sessions), then arranged with content (assignments and supplementary materials) under each class meeting and/or unit headings. On the *Moodle* course page, students have access to other classmates and can

- post assignments
- view PowerPoint presentations and blogs
- read text documents
- read and create individual and group journals
- take quizzes
- request additional course resources
- view the course calendar

- view section links
- check attendance records, and
- contact the instructor, via email.

The instructor can also arrange, insert and delete course content and activities from the Moodle course homepage.

CMS-supported activities

Large-group lectures

Lecturing from a PowerPoint presentation is an easy way to introduce each new activity and assignment. Students can follow the instructor's presentation on a large screen or click through presentations on their own. PowerPoint presentations that contain language support and/or more graphic information are also very helpful for EFL students when presenting difficult vocabulary or concepts (Kol & Scholnik, 1999) which typically arise in more advanced writing courses.

Small-group tasks

The hallmark of a "process approach" composition classroom is small-group activities (Atwell, 1998), and the CMS is particularly useful for facilitating the most common type of activity: peer and small-group response work. To group students into separate "communities of readers," Moodle's group mode allows the instructor to choose between three modes:

- No groups—where everyone is part of one community,
- Separate groups—where each group can only see members within their own group and others are invisible, and
- Visible groups—where each group works in their own group, but can also see other groups. By allowing the instructor to create working groups in this fashion, they can tailor the reader response task to each assignment.

Small-group response groups

Generally speaking, peer response groups in the EFL/ESL context tend to have limited benefit for two reasons: first, learners' low-proficiency in L2 affects their ability to respond in a constructive manner to issues of correctness and appropriateness; and second, cultural influences sometimes make commenting on others' work seem inappropriate given that all members of the group are peers. Given this situation, the CMS can play an important role in mitigating some of these limiting factors. First, if students are asked to comment on specific areas of their peers' texts (both rhetorical and syntactical) through the use of the Journal function in Moodle, and where student work may be viewed by the instructor and the author, the instructor can intercede if peer responses are either "off topic" or inappropriate. In either case, the instructor can "filter" comments back to the original author, adding his/her own comments (clearly identified as those of "the teacher") and add credibility to the peer's comments. Thus, through this "added step" in the peer review process,

the quality of the responses are insured by the “filter” of the instructor, and the sometimes difficult position of peer-to-peer critiquing is somewhat lessened. Finally, by “looking over the shoulders” of peer response group members, instructors are able to ascertain the level of comprehension taking place within a particular group, and this insight is often the basis for further dialog between author, instructor and peer reader.

Student blogging

One obvious benefit of blogging is the immediacy of the medium --dynamic, non-linear, and “real time.” Moreover, the benefit of the dialogic underpinning student “conversations” and its connection to the making of meaning underscores the value of the technology supporting blogs. Within a “process approach” writing curriculum, blogs are especially useful in facilitating reader response activities. The purpose of these activities is to help create an awareness of reader/writer responsibilities as authors share their drafts within peer response groups, gather feedback from readers, then choose whether to incorporate peer suggestions into later drafts. In the EFL composition classroom, the blogging function in the *Moodle* CMS can be used in a variety of meaningful ways, for example: Blogs can be used to help stimulate and narrow subjects of discussion into appropriate topics for writing assignments and/or maintained to document the “frustrations” and “successes” of class members. Also, they can be written in L1 or L2, depending on the aims of the instructor. Finally, mobile blogs (or MoBlogs) have proven to be very popular with students as they use their personal mobile phones to upload content directly to the Web, posting photo, video and text files to create personal diaries or lifestyle journals (Thornton & Houser 2002, 2003). As a discourse genre and community, students feel very “at home” with blogs.

Student presentations

As noted by Phinney (1996), L2 composition students can benefit by developing their presentation and collaborative working skills when they incorporate multimedia into their classroom presentations. The Presentation function within *Moodle* CMS can help support this technology. The most common tool in making a simple presentation is with PowerPoint, and students can easily add Flash file video as part of their PowerPoint presentations. All modes of discourse can be explored and/or supported using multimedia; students can use photo or video images to accompany field notes, a memoir, and an informative or persuasive essay. PowerPoint can also display text files which might include graphs. After student presentations are completed, they can be hosted on the CMS for all students to access and respond to.

Sentence-level grammar, punctuation and vocabulary exercises

When students have entered the Editing stage in the writing process, the CMS can help “fine-tune” their sentence-level grammar, punctuation and vocabulary skills. Through *Moodle's* Quiz function, students can first review and then take quizzes that assess their knowledge. In addition, *Moodle* supports *Hot Potatoes*. *Hot Potatoes* quizzes are very self motivating. Finally, if instructors allow their students to take these quizzes multiple times,

students will often do so to improve their final scores. The CMS is able to facilitate these important skill-based activities and allows students to work at their own pace with the idea that students will transfer these skills and vocabulary items back into their final drafts.

Integration of *Moodle* into an L2 composition classroom: Benefits and problems

By implementing *Moodle's* CMS technologies into an L2 composition course, instructors benefit in the areas of organization, implementation, distribution, communication and assessment. First, all coursework and outside recourses can reside in one location and can be easily revised and restructured. Second, by leveraging all of *Moodle's* tools (software, web-based services and technologies), instructors can quickly create interesting and motivating projects and assignments. Third, distributing course materials is as easy as "logging-in" into the course homepage. Fourth, *Moodle* helps manage all communication between instructors, individual students and peer-response groups. Finally, *Moodle* can help maintain and display student assessment records.

From the student perspective, the implementation of a CMS means: no more lost folders, no more dull assignments, no more time wasted asking the instructor for additional resources and no more waiting to talk to the instructor.

Putting technological (hardware and software) and institutional issues aside, most complaints concerning the implementation of CMS technology in the classroom come from instructors. "Chalk and talk" is a media and an approach that is well tested; and as a result, many instructors are skeptical about the return on their investment of time "setting up" the course. Unless these instructors have already included Multimedia as part of their presentations and assignments, building a CMS-based course will take time --as well as imagination. However, the overall benefits, both pedagogical and operational, clearly warrant this investment.

Conclusion

Moodle is useful in a "process approach" EFL composition classroom. In particular, *Moodle's* tools, which support a socially mediated approach to language learning, should remind us of the "great potential for encouraging reading as a social production of meaning" (Murphy-Judy, 1997) as well as the potential to encourage our students to "externalize their private speech exclusively in the L2 in order to mediate and organize their thinking... [when] explaining the content of an expository text." (Lantolf, 2006). Furthermore, Phinney (1996) has noted how "collaborative techniques have a positive effect on social integration and on the negotiation of meaning, which in turn positively affect learning." Given the communicative tasks that students will face in the workplace, teamwork and strong presentation skills are more necessary than ever; and through the integration CMS technologies into L2 composition curricula, we can "turn the classroom into a laboratory in which students can prepare for the real world" (Phinney, 1996).

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Effective implementation of interactive podcasting for the Web 2.0 generation

Michael Vallance & Yukiko Shibata
Mirai Daigaku, Japan

Podcasting has become a popular medium for teaching and learning in modern universities and schools worldwide. Most often used podcasts are developed by instructors to broadcast content information for their students to access at leisure. This article explains how podcasts have been developed by students to support their learning and share with fellow learners. In addition, the students' podcasts are furthered by adding multimodal interactivity with text, quizzes, images and links to websites. This article details the development of the interactive podcasts and provides quantitative and qualitative evidence of their efficacy.

Introduction

Research on technology implementation in education supports the claim that the development of autonomous learners needs to be facilitated by a social constructivist approach to teaching and learning (Luke *et al.*, 2005). A constructivist approach is about constructing knowledge, not receiving it; thinking and analyzing, not accumulating and memorizing; understanding and applying, not repeating back; and being active, not passive (Marlowe & Page, 2005). With particular reference to Japan, Prefume (2007) argues that the implementation of a constructivist approach enhances the ability of foreign language educators to develop better communicators. Web 2.0 and its emphasis on social communication and collective intelligence fits well with the constructivist approach to teaching and learning.

Web 2.0 envisages the World Wide Web as a strategic platform in which data inserted by users leads to collective intelligence (O'Reilly, 2005). The Apple iPod is an example of the intersection of computing and Web 2.0 (Bull & Ferster, 2005) as podcasting harnesses the power of the Web platform through user participation in developing content with text hyperlinks to images stored on an iPod (or to Web pages if online). It is reasoned here that student-generated podcasts can be an effective medium and resource for learning.

Procedure

This section describes the initial development of a podcast using Apple's *Garageband* software. Before introducing podcasting to students, it is vital the instructor prepares the task aims, determines the specific language focus, has a clear vision of the intended outcome, and has a means of evaluating both the process and product (see Figure 1).

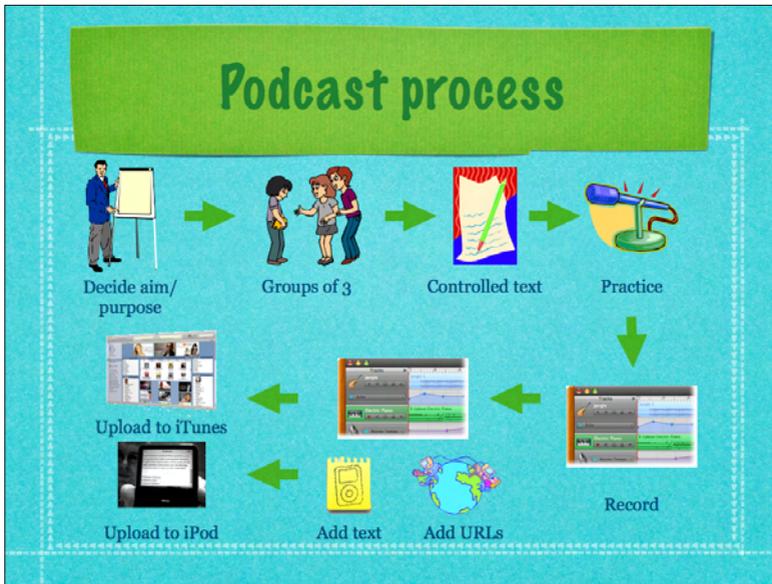


Figure 1. Podcast process

In this example, the topic of Paragraph Writing has been presented in a Communications Skills, Strategies class. The creation of a podcast is undertaken in the Communication Skills, Practices class. The aim of this podcast is to reinforce the components of a paragraph (Topic sentence + supporting ideas + concluding remarks) through oral production. An affective aim is to encourage students to practice speaking via the podcast rehearsals. A handout is provided for the podcast conversation but the focused components of paragraph construction are deleted for student completion (see Figure 2). The podcast is then ready to begin. The outcome will later be exported to *iTunes* and the *iPod*, complete with text links and Web links. A rubric will be used to assess the students' work.

Student A: Good morning/ afternoon. Welcome to Communication 2 at Future University here in beautiful Hakodate in Japan. My name is _____ .
Today I have with me..

Student B: Hello, my name is _____

Student C: Hello, my name is _____

Student A: In today's podcast we are going to talk about Communication 2 Strategies. Tell me <name of student B> what are you studying now in your Strategies class?

Student B: We are reviewing paragraphs with Professor _____

Student C: Yes, it is very interesting. Paragraphs convey one idea or one explanation.

Student B: Yes. And a paragraph contains different parts.

Student A: Tell me <name of student C> what are the parts of a paragraph?

Student C: They are _____ .

Student A: Thank you. <name of student B> , you studied paragraph writing with Miss _____ also. What topics did you write about?

Student B: I wrote about _____

Student A: Thank you. <name of student c> , you also studied paragraph writing with Miss _____ also. What topics did you write about?

Student C: I wrote about _____

Student A: Thank you. <name of student B>, what words connect sentences inside a paragraph.

Student B: They are called _____ words. For example, AND, BUT, _____, _____, _____

Student C: Yes. ALSO, _____ , _____ are more examples.

Student A: Well that is very interesting. You are learning how to write good paragraphs in your Communication Strategies class. Thank you. That concludes today's podcast. Goodbye.

Student B: Goodbye.

Student C: Goodbye.

Figure 2. Controlled practice text

On the Apple computer open the *Garageband* software and select Create New Podcasts Episode.



Figure 3. Create a new podcast in *Garageband*

The main functions to note when using *Garageband* for podcasting are the Record button, the Tracks, the Track Editor, the Loop browser, and the Media browser (see Figure 4).

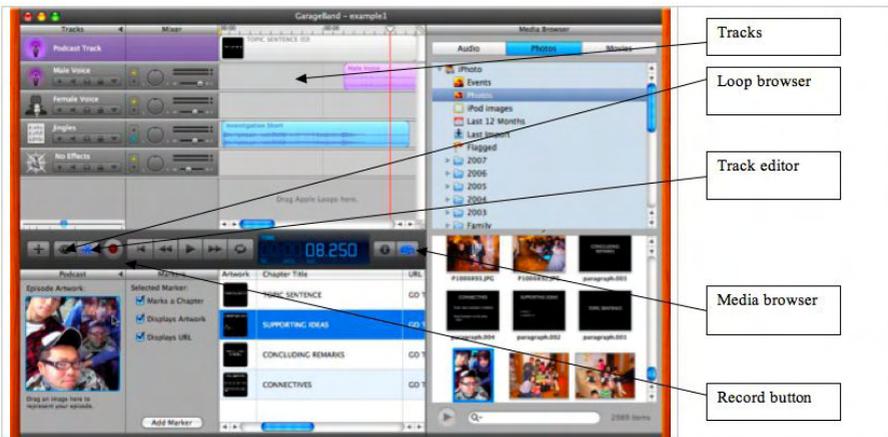


Figure 4. *Garageband* interface

Once the students have prepared their content from the handout provided, they can rehearse their podcast numerous times in *Garageband*. Select the appropriate Track (Male voice or Female voice), press the Record button and speak into the computer's microphone. To stop, press the Record button once again. To delete the recording simply select the track and press the delete key on the keyboard.

The advantage of this podcasting strategy is that while all students are rehearsing (speaking), the instructor can walk around and coach students on pronunciation and prosodic features of their English. The students, when satisfied, can then save their recordings (File - Save).

Before and after voice recordings in a commercial podcast is music. These are called jingles. Jingles are accessed by pressing the Loop browser button, selecting Jingles, and dragging an appropriate jingle to the Jingle track (see Figure 5). The jingles can be repositioned by dragging them horizontally along the Track. To normalize the sound so that both spoken audio and music are more or less at the same volume, use the track volume sliders.

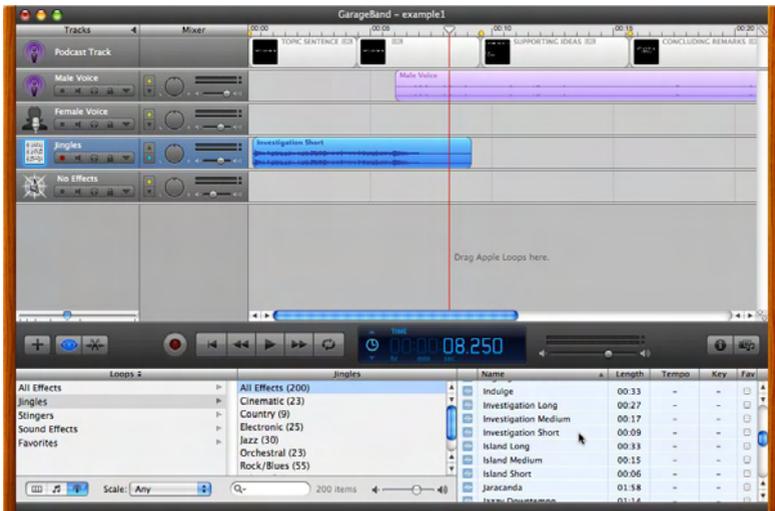


Figure 5. Add a jingle

The podcast currently contains the students' spoken audio plus some music before and after the speaking. Next, images that appear at predetermined times can be added. To do this, students can use a digital camera and upload photos to iPhoto. Alternatively, large font text can be typed into PowerPoint slides and then these slides exported as JPEG images to iPhoto. To view the images in *Garageband*, select the Media browser button and drag the appropriate image to the uppermost podcast track (see Figure 6). The duration of the image can be altered by making the image length longer or shorter. To add a Master image of the students, drag their picture to the Episode artwork box on the far left of *Garageband*.



Figure 6. Add images

The images within this enhanced podcast can be linked to relevant Websites. Select an image in the podcast track. The Chapter title, URL title and Web page address (URL) can be typed in (see Figure 7). This means that when the podcast is opened in iTunes on a computer connected to the World Wide Web, one can click the link within the podcast and the computer's Web browser will open at the selected Website. This is an opportunity for students to seek and negotiate appropriate Web pages for linking.

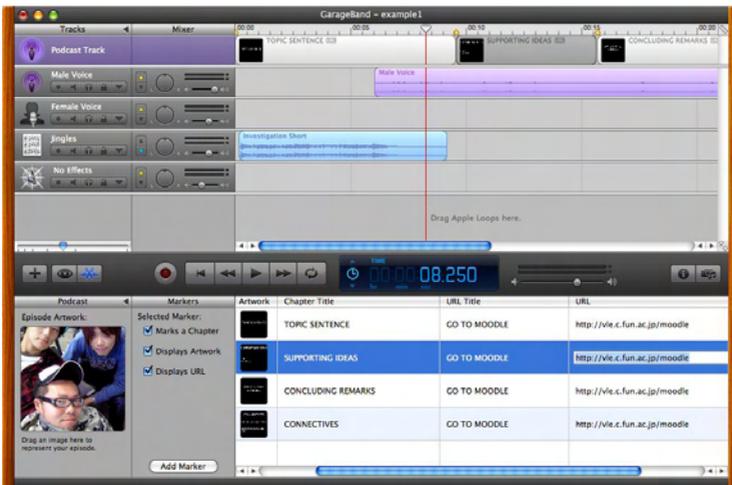


Figure 7. Add Web links

The podcast is now ready to be exported as a 'mp4a' file to *iTunes*. Simply choose the Share menu and Send podcast to *iTunes* (see Figure 8). The podcast will automatically open in *iTunes* (see Figure 9).



Figure 8. Send to *iTunes*



Figure 9. *iTunes*

To add value and interactivity to podcasts, text links can be developed. To do this the *iWriter* software is highly recommended (see Vallance, 2006 for details of using *iWriter* for interactive stories called *iStories*). *iWriter* allows students (and instructors) to add text and links which can be viewed on an iPod. One example is to create some background text for a podcast and then link to listening quizzes which become viewable on the iPod. Open *iWriter* and choose the Quiz template (see Figure 10).



Figure 10. iWriter

Text can be typed into the main pages. Quiz questions with corresponding answers are added to the template pages as shown in Figure 11

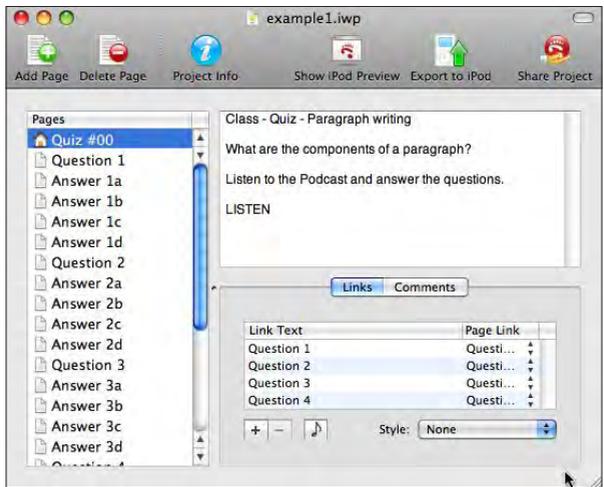


Figure 11. iWriter interface

The podcast is linked by selecting the audio icon (music notation symbol). The Link to song button needs to be checked and the correct audio chosen. Changing the caption is also advised (see Figure 12).



Figure 12. Add a Podcast

The development of the quiz can be viewed by selecting the Show iPod Preview button (see Figure 13).

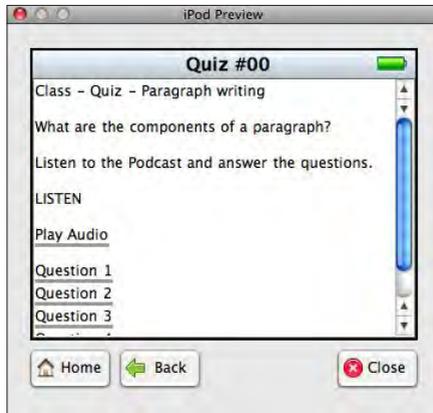


Figure 13. iPod preview

Once completed the Quiz and Podcast can be synchronized to a connected iPod by selecting the Export to iPod button (see Figure 14).

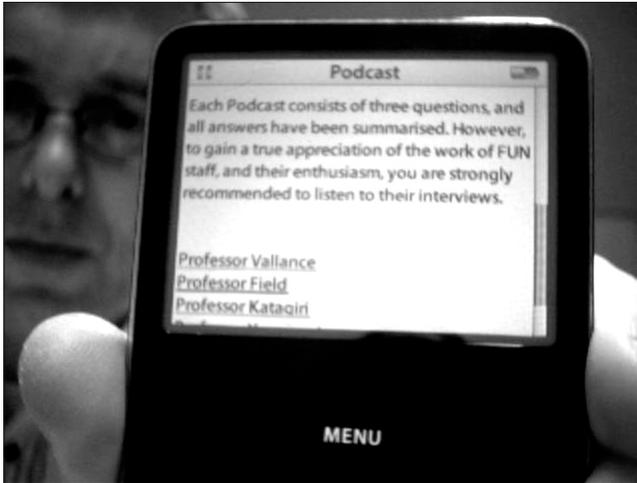


Figure 14. iPod

Discussion

Instructors using technology should always be asking, "Is IT worth it?" How can we determine whether the efforts and time of instructors and students are spent effectively? The academic literature, at best, suggests no significant difference in gains from tests between technology using students and those not using technology (Cox *et al.*, 2003). That is not to say using IT in teaching is not worthwhile. Towndrow & Vallance (2004) provide clear guidance for language teachers through a focus upon surrounding issues of informed use and a technology influenced pedagogy. Towndrow (2007) particularly focuses upon task design. For individual teachers all working with unique students in unique settings under unique circumstances, a suggested strategy is Action Research. Quite simply, this means collecting data about the students and determining if technology did in fact make any difference. This can be done in a number of ways. One suggested procedure is to use a pre and post test format. The results will not only reveal any impact but also help teachers reflect and act upon their existing pedagogies for better teaching.

The data in Figures 15 and 16, Graduate Study results, show students' pre and post text scores using iPods in a first year Communication Skills course at Mirai Daigaku, Hakodate, Japan. Podcasts were developed by different students. The tests involved recognition of facts that were discussed throughout the podcasts. Some podcasts were in Japanese and English but the emphasis was not always on language but often upon topic content. Students' general knowledge would have been tagged in the pre test. The results indicate an increase of 15% and 10% for Groups 1 and 2, respectively. The higher scores in the post tests suggest a recognition and recall of the information gleaned from using the iPods. A 't' test confirms that the results are indeed statistically significant and that the use of the iPods did have a positive impact on retention of information. A further detailed study will be conducted in the next academic year using a control group and an experimental group.

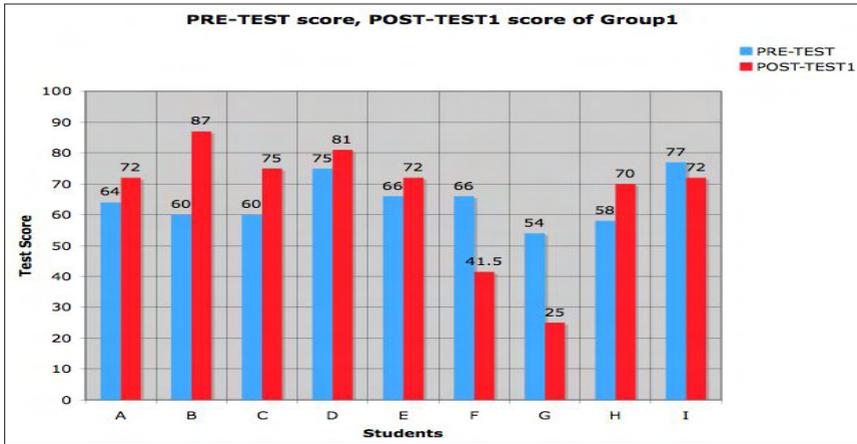


Figure 15. Graduate Study results- Group 1

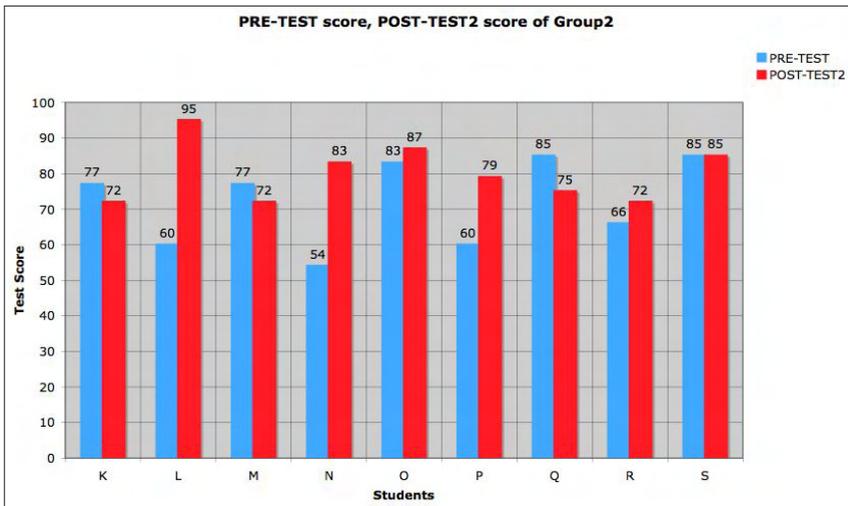


Figure 16. Graduate Study results- Group 2

Percentage differences indicate most students increased their post test scores (see Figure 17).

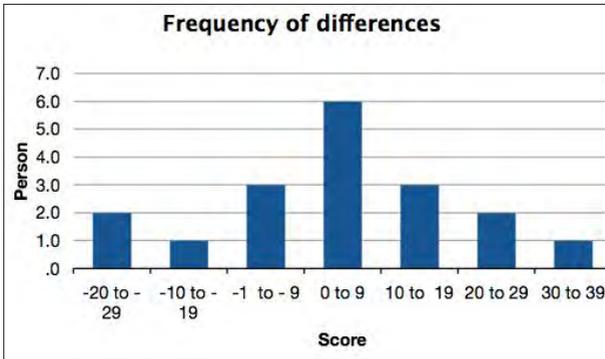


Figure 17. Frequency of differences

Students generally enjoyed using the iPods for study: 84% of students stated that iPods should be used by the university in future. A summary of comments are provided in Figure 18 and Tables 1 and 2.

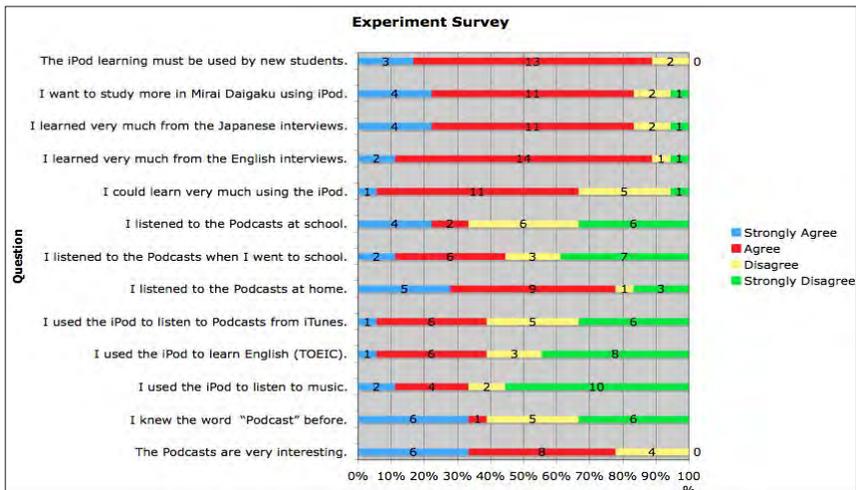


Figure 18. Graduate Study survey

Table 1. Positive comments about iPod study

Japanese	English
iPodを使って楽に勉強できた。	I could easily learn using iPod.
Podcastという言葉は知っていたが、実際にどの様なものかは知らなかったので貴重な経験になった。	I knew the word of "Podcast", but I didn't actually know anything. It was a precious experience for me.
iPodを使った学習は効果的だったと思う。学習もスムーズにできた。iPodを使うことに興味を持ったし、多様な使い方ができる機械だと思った。	Pod learning is practical. So I could learn smoothly. I could be interested by iPod, and I thought that iPod is a variety of machine.
iPodを使ったことがなかったので、楽しかった。	As I had not used iPod, so I enjoyed it.
何度も繰り返し聴けるので、勉強のためにはなると思った。	As iPod can be listened over and over again, it is very useful for learning.
今度、自分のiPodが手に入ったら、それで音楽を聴いてみたい。	I will want to listen to music by iPod when I get my iPod in tune.
Podcastはとてもおもしろいと思う。	Podcast is very interesting.
Podcastはとても楽しいものだとおもう。	Podcast is very nice.
iPodに、学習教材をいれて持ち歩けば、いつでもどこでも学習することができるので、時間があまりない人が、移動時などに聴くと効率がいいと思った。	If I put the learning teaching materials in iPod and carried it, I can learn anywhere anytime. So I think that iPod is an efficient for the busy person to listen at the time of movement.
TOIECの問題を、MoodleのiPod quizに出題すれば、より一層理解度が深められると感じた。	I felt that understanding degree was deepened still more if I made questions for a problem of TOIEC in iPod quiz of Moodle.

Table 2. Negative comments about iPod study

Japanese	English
iPodはとてもなじみ深くなく、突然、iPodを渡されてもまどうばかりであり起動できなかった。	Because iPod is very unfamiliar for me, I was confused when I was given iPod. So I could not boot it.
「学習しよう」という意識なしで、ただ聴くだけでは、興味のある内容しか頭に入らなかった。	Just I listened to it, I could not remember all contents without a intention of learning.
iTunesのPodcastから取ったものなら、iPodを使って続けて聴くかもしれないが、インタビューしか聴けないと、1回聴くだけで、何回も聴くことがないと思う。	The person may continue listening Podcast downloaded from iTunes using iPod. But I may not listen again and again. Because it is only interviews.
同じものを何度も聴くとあきてしまうので、あまり聴くことができなかった。	I could not listen little time. Because I was tired of some stuff.

iPodを聴く時間が少なかった。

I could not have enough time listening by iPod.

iPodはあくまで屋外での利用が基本となるので、屋外での使用となると、音楽でも何でも聞き流す程度なので、勉強には不向きであると思わなくもない。

Mostly iPod is used outdoors, I think that learning iPod is unfit to learning because using it the outdoors pay no attention to music or something.

SPIの話は要点がどこにあるか分かりづらかったので、あまりおもしろくなかった。

The interview of SPI is not so funny that it is not understandable when the story is essential.

The above data will prove useful in the development of future podcasts by students for students.

Conclusion

In conclusion, podcasting has been shown to be a valuable technology tool to support students in their language development. Adding interactivity to a podcast introduces the multimodal elements of text, audio and images for a more enlivened and creative learning experience. Passing ownership of podcasting to the students is motivating as it allows students to share their digital artifacts with their classmates, friends and the world. This is, after all, the collective intelligence of Web 2.0.

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Useful links

Name	URL	About
Garageband	http://www.apple.com/ilife/garageband/	About the software
Student gallery	http://www.apple.com/jp/education/profiles/index.html	Podcasts in education in Japan
Pavitar Singh	http://www.pavitersingh.com/WhyPodcast	Podcasts at school in Singapore
Graduate Study	http://homepage.mac.com/graduatestudy/	Mirai University podcasts
<i>iWriter</i>	http://www.talkingpanda.com/iwriter/	Add text to iPods
Audacity	http://audacity.sourceforge.net/	Audio alternative
Mogopop	http://www.mogopop.com	Upload to Web

Key terms

- *Garageband*: software by Apple for producing podcasts and other audio artifacts.
- iPod: a portable, multiple media player manufactured by Apple.
- Multimodal: in educational technology contexts, a mix of text, audio, video and images.
- Podcast: a digital audio broadcast that can be played on a computer or a portable media player.
- Task design: an arrangement of a scheme of actions leading to a learning outcome or artifact.
- Web 2.0: technology tools for shared communication by multiple users leading to collective intelligence.

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Digital Video in the Language Classroom

Mark Shrosbree

Tokai University, Japan

Introduction

Video-based methodologies are well-established in second language teaching. Perhaps most common is the use of video as an alternative to more traditional cassette tape and CD listening comprehension activities. Video allows learners to see the context of the discourse and the speaker's body language as well as other visual aids to comprehension. It is thus hard to question Stempleski's (1987) assertion that video aids learners' comprehension of English. Another use of video is to record student projects, such as role plays, documentaries and TV commercials (Brooke, 2003). As video technology becomes more accessible and editing on computers simpler, such projects are becoming increasingly attractive for the language classroom. Video also offers several other possibilities for language learning. One interesting use of video is to document and assess students' productive performance of a second language. Video naturally lends itself to the assessment of presentations and public speaking, but it can also be applied to pairwork and group discussion tasks. Furthermore, to help students develop their speaking skills, teachers can make 'model videos' which visually demonstrate what students are expected to do in an oral task. Finally, digital video technology allows teachers to manipulate authentic video, which can be edited, subtitled and simplified to make it more suitable for language learners. With relatively inexpensive equipment, and easily acquired skills, teachers and learners can employ a wide range of effective and motivating video methodologies. This paper will outline the practical aspects of choosing hardware, the basics of using video editing software and a range of methodological applications for the language classroom.

Background

There is an obvious appeal to using video in the language classroom. Instead of the rather unnatural task of listening to a disembodied voice emanating from an audio player, learners are able to see the speaker and elements of the surrounding environment. Video is thus a "multi-sensory medium" (Swaffar & Vlatten, 1997). Research suggests that these multiple clues help language learners to understand a particular

discourse as well as to improve their long-term listening comprehension skills (Herron *et al.*, 1995). Video-based instruction also appears to improve aspects of learners' oral production, particularly their "confidence in speech" (Weyers, 1999). A further benefit of video is that it can simply provide a welcome break from the rigors of more traditional study. Moreover, with digital video technology, it is now a relatively straightforward process for teachers to produce their own videos which are specifically aimed at one group of learners, bearing in mind their language needs and interests. Such teacher-made videos can provide positive models of target language, graded to the learner's proficiency, and thus offer a rich source of comprehensible input. Less obviously, teacher-made videos can also provide negative models, which students can analyse and use to improve their awareness of common pitfalls and errors when communicating in a second language.

Video technology can also be used to document students' language production, both to enhance the validity and reliability of language assessment, and to provide motivating and rewarding tasks with a clear, meaningful purpose and a concrete finished product (Biegel, 1998). Furthermore, students can observe their own current English oral proficiency (Shinohara, 1997), and thus discover areas they need to improve.

Hardware

Although there is now a wide and potentially confusing array of digital video equipment available, fortunately the simplest equipment is often the most suitable.

Video Camera

There are various choices of video camera, including standard and high definition video. There are also various choices of recording media, including Mini-DV tape, DVD, hard-drive and Flash memory cards. The following specifications are considered suitable for methodologies described in this paper:

1. Standard definition camera: Standard definition video files are smaller than high-definition video (HDV) and require less system resources to edit.
2. Mini-DV tape media: Mini-DV tape is an inexpensive, removable media, which can store up to 120 minutes of video in long play (LP) mode.
3. External microphone socket: An external microphone provides better audio quality, which is essential for assessment purposes.

Other Camera Hardware

1. Tripod: A basic, sturdy aluminium tripod is sufficient.
2. External microphone: A high-quality, battery-powered microphone is important, especially for assessment where the student might not be speaking loudly or clearly.
3. Microphone stand: A small desktop stand is recommended.
4. Microphone extension lead: This allows the video camera to be placed far away from the speaker, which can reduce nerves; it is also valuable when recording presentations.

Computer Hardware

Most personal desktop computers (and many notebook computers) are now shipped ready for video editing. The video camera is connected to the computer via a 1394 ('Firewire') connection or USB 2.0 (in the case of newer hard drive cameras). If the computer does not have a built-in Firewire adapter, one can be bought cheaply. In terms of performance, the main requisites are sufficient memory (1GB or more of RAM is recommended) and storage capacity (1 minute of good quality compressed video saved at a bit rate of 2.1Mbps requires around 14Mb of disk space).

Computer Software

Although there are many video editing applications available, this paper illustrates the video editing process using Microsoft *Movie Maker*. This software is bundled free with Windows XP and Vista, and is thus widely available, particularly in computer labs. It is also easy to learn and the quality of finished videos is more than adequate for language learning purposes.

Pedagogy

Broadly speaking, there are three types of videos for language teaching purposes: assessment videos, teacher-made videos, and student-made videos. Within each of these categories, there are numerous possibilities; these will be described below as a range of video methodologies:

i. Assessment Videos

Methodology 1: Video Pairwork Assessment

Although there appears to have been little research into the assessment of oral performance through video-recorded pairwork, this is one of the most appealing applications of video technology. A Video Pairwork Assessment methodology has been developed at Tokai University as an alternative to the more familiar teacher-student interview test, which may not always elicit the student's best performance. In contrast, the pairwork test offers a range of advantages for the learner:

- a. The student speaks to a peer (symmetric discourse), rather than a teacher/assessor (asymmetric discourse). This is important as teachers tend to be in a position of power and control in foreign language classrooms (Stubbs, 1983). In Japan, this asymmetry may be particularly strong, as the normal relationship between student and teacher has been described as one of 'polite distance' (Watson-Gegeo, 1988, p. 586). The experience at Tokai University supports this, as students generally appear to perform better in pairwork tests than in interview tests.
- b. Students are able to practise for the test each class meeting, as pairwork is central to communicative methodologies; it would be impractical to practise teacher-student interviews every class.
- c. Students who perform poorly in the pairwork test can be offered a retake; again, this is not so practical with interview tests.

In brief, video pairwork testing involves placing the video camera, tripod and external microphone in an empty classroom. Students go to the room in pairs, sit down face to face near the microphone, and then hold an open, unplanned conversation for 6 or 7 minutes. At the end of this time, the next pair takes their place, and this continues until all students have held a conversation. The video camera is left running for the duration of the test, and then the resultant video is later watched and assessed by the teacher. There seem to be several clear advantages with this kind of assessment:

- a. Validity of assessment of peer pairwork conversation promises to be higher than for interview tests, as it assesses what students have been doing throughout the course, and involves an activity which they are likely to encounter in the future (an unplanned conversation with a peer).
- b. Reliability is also higher in a video-recorded test than in a real-time test, as the teacher can watch the video more than once, check for grading 'drift' from the first to last speakers, and also check from one year to the next.
- c. Pairwork tests seems to offer very positive washback, as 'studying for the test' actually involves practising conversation skills.
- d. Video assessment may be less stressful for the teacher than real-time assessment, as it is possible to take breaks when tired.
- e. There is a permanent record of the student's performance.

A further advantage of video pairwork testing is that practice tests are easy to conduct, and offer students the chance to watch their own performance. One way to distribute test videos to students is to capture the videos to a computer and then upload them to the Internet (see *Distributing Video* below). Students then watch their videos and assess their own performance. For a detailed explanation of pairwork assessment, see: < www.shros.org/digitalvideo/>.

Methodology 2: Presentation Assessment

Student presentations and speeches are very amenable to video assessment. By recording the presentation, the teacher is able to compare in-class rating with subsequent rating of the presentation videos. If a one-week time lapse is allowed between the two ratings, the teacher can appraise the reliability of his/her rating. As with the pairwork testing, video of the presentation can be uploaded to a class homepage and self-evaluated by the student.

Methodology 3: Practice tests

Video also allows students to rehearse for a test or presentation. When the video camera is turned on in front of rehearsing students, they are likely to take the practice much more seriously.

ii. Teacher-Made Videos

Methodology 1: 'Model Videos'

Video allows teachers to prepare clear models of what students are expected to do in classroom activities. Although pairwork is a very common communicative teaching methodology, it is often hard for students to know what is expected of them. To address this problem, teachers at Tokai University created video clips of themselves acting out a variety of pairwork skits. These skits show typical problems found in pairwork (negative models) as well as successful interactions (positive models). To create these model videos, the teachers involved in the project observed their classes and collected typical mistakes, such as 'one-word answers' and 'inappropriate questions', and then wrote a basic script for the video clips. Two teachers then performed the skits in front of the camera. The video clips were edited and transferred to VHS for showing in class. Worksheets were also prepared to accompany the video clips (see www.shros.org/digitalvideo/ for examples). After watching the videos and analysing the weaknesses demonstrated in each clip, students could conduct their own (hopefully improved!) pairwork conversations. Similar model videos have also been produced for other oral activities, such as presentations and discussions.

Methodology 2: Comprehension Activities

Experienced teachers are very good at modifying their speech to aid the comprehension of their students. Teachers can exploit this experience by making their own simple videos, which offer a rich source of comprehensible input for students. One simple activity is to ask a number of teachers two or three questions, and then have students compare the teachers' answers. At Tokai, short videos were prepared for a cultural comparison class. Foreign teachers were asked questions such as 'What do you like most about living in Japan?', and 'What do you find difficult here?', and Japanese teachers who lived abroad were asked 'What did you like most about living abroad', and 'What did you find difficult there?' The video was edited and worksheets were made. The activity was successful as it provided useful comprehensible input, and offered students the added incentive of learning something new about their teachers.

Methodology 3: Content Instruction

Video can also play a valuable role in content-based instruction (CBI). A problem with CBI is that authentic content is often too difficult for language learners. Digital technology allows teachers to manipulate video in order to make it more suitable for their students. It also allows teachers to capture short video clips from the internet, and show them in class (note: copyright restrictions may apply).

One easy way to make video suitable for a group of learners is to choose something they can relate to, and then edit it to a manageable length. Even a thirty-second news clip can effectively introduce a topic, without overwhelming students. Such video clips can also be embedded in a *PowerPoint* presentation, which allows the teacher to visually display background information and vocabulary prior to showing the video clip.

There are two other useful ways video can be manipulated using *Movie Maker*. First, the audio can be cut or muted and replaced with a simplified teacher commentary. News and documentary clips are particularly amenable to such manipulation. Second, the titling function can be used to add subtitles or key words to video.

iii. Student-Made Videos

Methodology 1: Student Videos

One of the attractions of digital video is that it allows students to work in groups to make an impressive finished product. In order for the project to be a success, it is advisable to start early in the semester, and allot enough class time for planning and completing the project. A typical schedule would involve four class periods for planning the video, working on language aspects, learning how to edit, and finally showing the finished videos. Provided video cameras can be lent out, students generally shoot the video and finish off the editing for homework. As video projects can be quite challenging for students and teacher alike, a simple theme is best. In an Oral Communication class at Tokai University, the most successful themes were 'Aspects of Campus Life' (see Shinohara (1997) for details of a similar project) and introductions to favourite places around campus (see Brooke (2003) and Biegel (1998) for further suggestions).

One problem with student video projects is that they can require a large amount of time. A simple 5-minute video can involve a considerable amount of filming and editing work when students' time might better be spent learning English. For this reason, it is suggested teacher plan the projects carefully (for sample handouts, see <www.shros.org/digital-video/>), and keep the finished video short (a 2-minute video for the first project). It is also important for the teacher to ensure that students focus on the English language aspects of the video (on-camera speaking and commentary), rather than visual aspects.

Methodology 2: Movie Slideshows

A simple alternative to student-made videos is the idea of 'Movie Slideshows'. Students use digital still cameras or mobile phone cameras to take photographs on a theme, such as 'My Hometown'. They then use *Movie Maker* to produce a photographic slideshow, complete with English commentary and music soundtrack. These slideshows can even be uploaded to *YouTube.com*, and students can receive feedback from around the world (a search on *YouTube.com* for 'EFL slideshow' will reveal a large number of such slideshows). For an excellent explanation of ESL slideshows, see the ESL/EFL Slideshow Exchange Project <<http://www.deepmoat.com/moodle/>>.

Methodology 3: Audio-only Projects

It is also possible for students to use video technology for audio-only products, such as radio shows. The BBC radio show 'Desert Island Discs' is particularly suited to this (see <<http://www.bbc.co.uk/radio4/factual/desertislanddiscs.shtml>>). Students interview each other about the eight records they would take with them to a desert island, giving the his-

tory of their relationship with each record. If no other digital audio recording equipment is available, a video camera can be used to record just the audio, and then *Movie Maker* can be used for editing. When used in an Oral Communication class at Tokai University, this activity was very popular, and produced some excellent spoken discourse.

Capturing, Editing and Distributing Video

Capturing Video

The first step after shooting video is to 'capture' it to a computer. If the computer is running Windows XP or Vista, the camera just needs to be connected to the *Firewire* port with the appropriate cable, and a menu will pop up offering *Movie Maker*. It is a simple matter to follow the steps and capture the video to the computer. The only real decision is on the quality and file size of the captured video. The following three choices are suitable for classroom videos:

- DV-AVI(NTSC) – highest quality uncompressed file; particularly suitable for making videos which will be projected onto a large screen.
- 2.1 Mbps – compressed WMV file; suitable for showing on a TV monitor.
- 512 Mbps – compressed WMV file; suitable for publishing online (high-speed LAN).

Editing Video

Windows *Movie Maker* is particularly suitable for all the editing purposes described in this paper as it is simple, quick to learn and widely available. The software interface employs a 3-step menu which allows the user to undertake the following tasks:

Capture Video

- Capture from video device (camera)
- Import video (from computer hard drive)
- Import pictures (still images)
- Import audio and music

Edit Movie

- Add video effects (such as slow motion)
- Add video transitions (such as fading between clips)
- Add titles and credits

Finish Movie

- Save to my computer (export finished video to computer hard drive)



Figure 1. Windows Movie Maker interface (Japanese)

There are two views to make editing simple: 'Timeline' (especially useful for cutting video and audio), and 'Storyboard' (useful for adding transitions). Another useful feature is the ability to add a narration directly into the timeline. Once the video is finished, it can be exported to the computer in a range of file sizes / quality choices.

Distributing Video

Finished videos can be stored on a computer hard drive, copied to removable media (such as CD-ROM, flash memory) or uploaded to the internet. If a class homepage is available, uploading to the Internet is often the easiest way for the teacher to distribute video, particularly when the teacher wants students to self-evaluate their production of the target language. Smart FTP software is a good choice for uploading video files to a website as it is free for academic purposes and allows a large number of files to be uploaded by simple drag and drop.

Conclusion

This paper has described pedagogical applications of digital video for the language classroom, together with an overview of the technical considerations. Thanks to the development of digital video and computer technology, there are now numerous ways that teachers can use video to help their students learn a second language. Perhaps the most valuable pedagogical application of video is 'video pairwork assessment', which allows students to

be assessed through the familiar communicative activity of pairwork with a classmate, and also permits self-evaluation. Digital video also allows teachers to make high-quality teaching materials, which are tailored towards a particular group of learners. Of particular interest here are the 'model videos' which visually demonstrate unfamiliar classroom activities, as well as offer learners the chance to analyse common errors and weaknesses. Students can also take control of the video camera and create their own videos. These student-produced video projects can be a highly motivating part of a language course.

Digital video has come a long way in a very short time. Just a few years ago even the highest performance desktop computers struggled to deal with the large files and large memory requirements of video editing software, which itself was difficult to learn and complicated to use. Student video projects were often interrupted by crashing software and lost data. This has all changed now, as even basic laptop computers can comfortably edit video files using video editing software which is included with the operating system. Furthermore, mobile phone cameras can capture high quality still images, and even reasonable quality video. Since many mobile phones have flash memory slots, the data can be transferred directly to a computer. However, it is important to recognise that the wide range of possibilities offered by new technology can actually discourage teachers from trying to use these technologies in class. It is thus necessary for teachers to be selective and choose applications which have a good balance of time and effort relative to the rewards. Video pairwork assessment is a particularly good application of digital video, as it offers a wide range of benefits to individual learners (even in large classes) for a relatively small outlay of teacher time. Similarly, teacher-made videos, especially 'Model Videos', offer benefits and many years of use for a modest outlay of teacher time and effort. In contrast, student-made videos may not always offer sufficient rewards to justify the time spent on the project.

Finally, recent developments with the Internet have opened up a range of opportunities and challenges for the language teacher. The popularity of video sharing websites, such as *YouTube.com*, and blogs has provided a potential international audience for students. It is now possible for students to display their videos online, and to receive genuine feedback from people around the world. This could be particularly motivating for learners in an EFL setting, as it provides opportunities for authentic communication in English.

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(Endnotes)

- I The author conducted both interview tests and pairwork tests with one group of students. Most students appeared more relaxed and performed better in the pairwork test than the interview test.

Moodle in the writing lab: Foregrounding task design as topic in instructor-learner exchange

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The JALT CALL Journal

Introduction

The *Moodle* course management system provides an enabling environment for the delivery of English as a second language instruction. This paper presents a by-product use of *Moodle* as a textbook authoring environment, and opens a related question: does on-the-fly in-class task revision in the *Moodle* classroom environment create a scenario which supports (or in fact gives rise to) learner initiated discussion of task issues such as effectiveness, performability and appropriateness?

Scenario

The Technical Writing 2 and Research Writing courses (4 months each) at Kochi University of Technology (KUT) were explicitly designed for non-Japanese engineering doctoral students in the first year of a three-year scholarship degree program. Since 2005 these courses have been delivered in a *Moodle* environment in a CALL lab. The author's original reasons for adopting *Moodle* were simply the electronic delivery of course material and the management of submission of student work (the "electronic workbook in the electronic classroom" approach).

In 2006, the author decided to stop using the (rather good, very long, quite expensive) textbook, Swales and Feak (2004) as a course book, and began using a set of writing strategy materials (Hunter, 2008) which he had gradually built while developing a *Moodle* based writing program. Those web-based learning materials were partly adaptations and extensions of the Swales and Feak material, and partly practical implementations of existing theoretical works, including Gopen and Swan's (1990) read-

ability work and Hengl and Gould's (2006) pragmatic studies of publishability. The syllabus structure of Hunter (2008) is shown in Figure 1.

Theme	Audience	Structure	Writing technique
Writing styles			
Accessibility			
Purpose of writing			
Effectiveness			
Clarity			
Using model language			

Figure 1. the content structure of Hunter (2008) indicates a pragmatic instructional approach

Clearly this pragmatic approach to writing instruction is an abrupt departure from traditional grammar oriented approaches. The students in the KUT doctoral writing courses come from countries with grammar-dominant instruction and practice in English as a Foreign Language (EFL), and the writing strategy approach embodied in Hunter (2008) meets initially with considerable learner dismay, doubt and suspicion. Thus the scene is set for extensive instructor-learner negotiation of task issues.

Shift to Moodle based delivery of writing course instruction

Prior to the author's adoption of Moodle, the CALL labs at KUT were redeveloped with a fully functional, richly supported Moodle course management system (CMS) environment. The author, having written several English textbooks and at the same time being sensitized to the rapidly changing education technology scenario, decided to shift the emphasis in his CALL lab course delivery from website-based input materials and email exchanges of student work and instructor feedback to a basic level of Moodle delivery with downloads of task files and uploads of completed task.

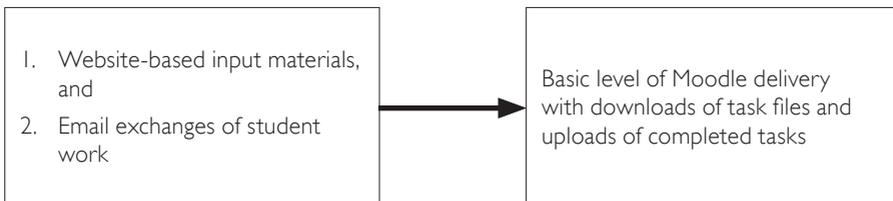


Figure 2. 2006 shift in CALL lab approach to curriculum delivery

Task development within the Moodle environment

After one year of Moodle delivery of the writing courses, the author conceived of the possibility of developing a writing textbook within the Moodle environment, managing files and refining task as the course proceeded, and eventually downloading resources and lesson memos as the body of a textbook.

Shift of task design focus: from ease of input/output to variation of processing

From a task design perspective, Moodle is useful: it enables the mechanics of file management and delivery to such an extent that the instructor can easily, readily vary the mode of language input and output within each task. This can lead naturally to the designed variation of processing required by each task.

For example, in one traditional writing task, the learner is given a set of written instructions and some text input, and is asked to follow the instructions in the manipulation of the text. One simple variation is to make the instructions available only as a sound file accessible via the course Moodle environment, and to ask the learners to analyze some aspect of the text rather than manipulating it. This is easily done in the Moodle environment, and results in a very different kind of processing on the part of the learner performing the task.

Such alternative task design can give rise to uncertainty in learners who have for years been given tasks of a uniform nature; this in turn gives rise to an increase in learner negotiation (confirmation, clarification) of task with the instructor. Metalanguage emerges and can become dominant; talk about task becomes common, supplanting talk within task.

The unique learner: instructor catering to a herd of niches

"Academic writing" covers a broad and diverse group of research topics and discourse conventions. Even within the narrowed target of learners in an engineering faculty, the mandate of the writing instructor is complex. Boettcher's (2003) Core Learning Principle #3 is that "Learners bring personalized and customized knowledge to the learning experience, and develop personalized and customized knowledge." The complexity is deeper than that, however: the target knowledge domain is different for almost every learner. The niche research fields of today's engineering all have their own target journals for publication, their own arcane lexis, jargon and even format, and their own degree of abstraction (compare engineering physics' mathematics-like discourse to the 'concrete' referents of civil engineers working on reinforced concrete issues). Thus there is the unavoidable question as to how to create task suitable for all the learners.

Textbook authoring motive and on-the-fly editing/redesign

The instructor of technical academic writing (TAW) must either create input and task tailored to each learner/learning scenario, or create input and task which are generalizable across the spectrum of learner/scenario. Here the author chose the latter tactic. The question arises: how then to tailor any input or task to those diverse learners in their diverse scenarios? One answer is to negotiate appropriateness, usefulness, motivational value and other learning variables on the fly, as the class proceeds week by week.

The mechanics of distilling textbook material from Moodle content

The Moodle environment allows for a variety of views of the content, including Learner, Instructor, and Administrator. Moodle's instructor view (with the editing function turned on) allows the instructor to insert links to files and existing online tasks such as Hot Potatoes tasks, and to create tasks such as uploading files of completed work. The instructor view environment allows easy access to folders of previously uploaded learning materials such as Word and media files. When a course is completed, the content of the Files folder can be downloaded, along with the content of the student interface (all the lesson introductions and blog-like content) that the learner sees in the main page of the course Moodle. The Files folder is particularly easy to use as a source of textbook material if the files have been named appropriately. For example, if the course has 15 class meetings, the first two characters of each file name could be the number of the class. Alternatively, if the course has four main themes, e.g. Sequence, Cause-effect, Inference, and Pro-con, the file names could begin with a few characters which indicate the theme, e.g. SEQ_vocab.doc, INF_oral.doc, PC_project.doc, CE_eval.xls

Instructor-learner discourse shift: from task content to task nature

During the first two months of the 2007 eight-month writing program, the topics of in-class learner initiated learner-instructor discourse changed in nature. Task content (ease and mechanics) remained a main theme, and in addition, learner-instructor discourse began to also address task nature issues (effectiveness, performability and appropriateness). This may well have been a result of the repeated instructor inquiries during class as to the learners' feelings about these issues, but extensive ethnographic study is needed to determine if there is a correlation between the two factors.

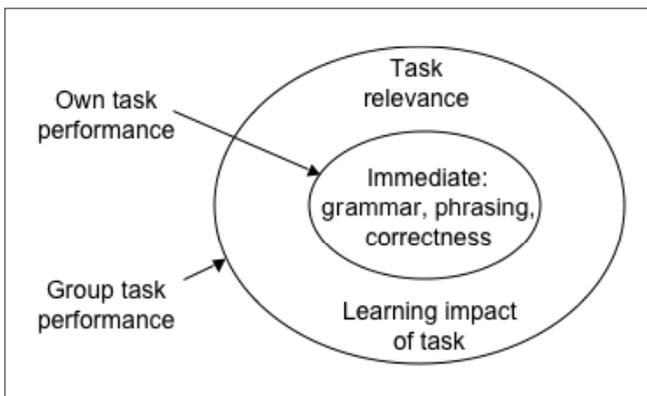


Figure 3. A speculative representation of learner attention in mid task. Here the outer circle represents the new behavior which emerged by the end of the second month of the 8-month 2007 course.

Multiple views of task for a collectivist environment

The Moodle interface also allows for dynamic discussion of text manipulation: in class discussions about register, readability or conciseness (to name but a few central aspects of text), the text window for the day's lesson (Moodle calls it 'Topic') can be used for the instructor's instructive manipulation of text in response to learner suggestions or instructor demonstrations. If the instructor's computer monitor content (showing Instructor view) is projected on the large screen, and the learner's computers are showing the same content but in Student view, the instructor's text grows different from what is shown on the learner's machines – until the instructor saves the changes and the learners refresh their web browsers.

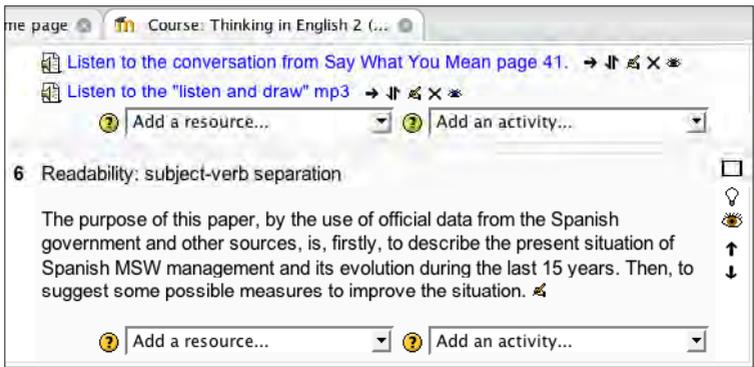


Figure 4. Initial text for an instructor demo (Teacher view, editing on).

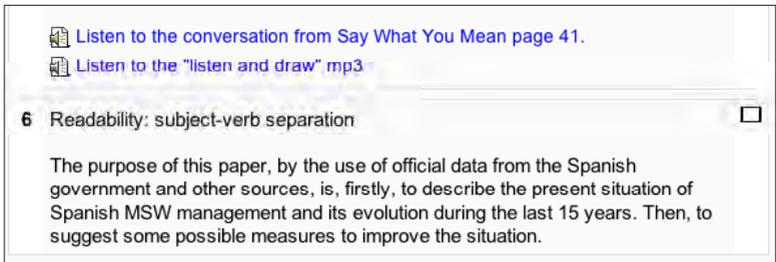


Figure 5. Initial text for an instructor demo (Student view).

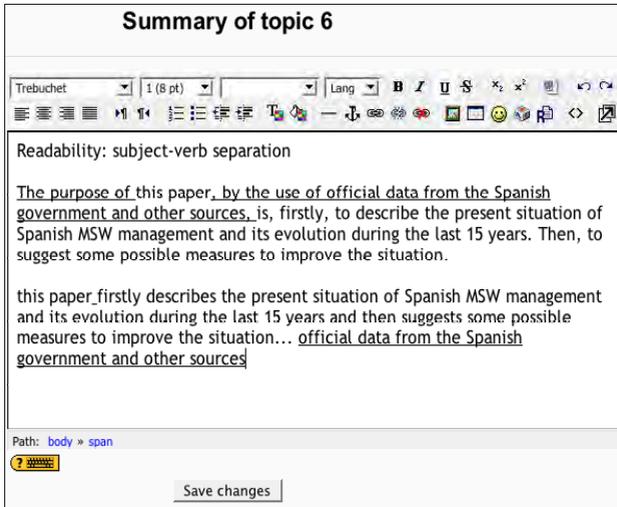


Figure 6. Altered text in an instructor demo (Teacher view, editing on, changes saved).



Figure 7. Altered text in an instructor demo (Student view after browser refresh).

The demonstration process, iterations of instructor change-and-save followed by learner browser-refresh, creates a collaborative, interactive atmosphere.

Multiple views of task as an inroad to perspective maintenance in task negotiation

The atmosphere created in the multiple views scenario for text manipulation sets the stage for collaboration at a higher level of abstraction: task negotiation. In task negotiation, negotiated issues include:

1. Task type and difficulty.
2. The wording of task instructions.
3. Task time allotment.
4. Relevance and performability of task.

Observations

Over the period of the two writing courses, informal observation identified two main features emerging in classroom discourse:

1. Learners proactively criticized the materials and readily gave feedback on readability and comprehensibility. This behavior increased in frequency during the course, particularly after the unit on readability of text.
2. Instructor willingness to revise tasks on the fly (thanks to the lab environment) led to learners partaking in, and even at times initiating, negotiation about task size, time allotment and (eventually) design.

Learner conscious attention horizon: locus of the learner's attention

The learner in mid-task is paying attention to several aspects of the task, and likely attending subconsciously to others. Asking the learner to pause mid-task and reflect on design aspects of the task is intrusive, and often evokes learner frustration or annoyance at the interruption of train of thought. Experience with the *Moodle* scenario suggests an interesting question: does the computer lab/*Moodle* environment create a physical environment in which learners can more easily move back and forth between task effort and task design reflection?

Conclusion

The need for ethnographic study of task related learner attention

Clearly the above observations and discussion are after the fact, and speculative. What is presented above does suggest a direction for future study and a tentative initial framework for such study. More specifically, some central questions are:

1. Does scaffolding of learner feedback about task enhance feedback in terms of volume, reflective quality or frequency?
2. Is the mid-task solicitation of learner feedback about task design detrimental to learner task performance?
3. Is it possible to create a learner feedback taxonomy or framework which will facilitate promptness and reduce cognitive load in task negotiation?
4. Is learner feedback in task negotiation scenarios different in nature from post facto feedback in questionnaires?
5. Is learner feedback on task design valuable in the redesign of task?

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Designing CMS modules to support language learning

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This article presents an overview of Course Management Systems [CMS] and how a CMS can be modified to support language learning environments. First, the author justifies the advantages of a CMS while examining how CMS fit into the realm of learning theory and pedagogy. Next, several crucial differences between open source and proprietary CMS applications, and the essential strengths and weaknesses that need to be considered when selecting a CMS are outlined. The main part of the article focuses on a particular open source CMS called Moodle and explains how it is possible to modify or add modules or blocks to Moodle in order to supplement or enrich language instruction.

Introduction to CMS

Web-based management systems have become a valuable element of instructional framework design for both language courses and content specific courses. Because of rapid developments in information technology, only recently have we been able to digitalize, process, and distribute vast amounts of information over high-speed networks. In education, particularly second language education, digital information needs to be managed or organized in a simple and logical fashion to ensure learners do not become overwhelmed. By customizing open source CMS, educators can better fabricate learning environments that facilitate the construction of knowledge for today's 'plugged-in' language learners.

CMS are software applications that typically run on a web server or network server and allow educators to easily manage course and student data through a web browser interface. The primary functions available in CMS are to organize and distribute course content, administer learning exercises or quizzes, and track student progress. While CMS software is often used to manage distance learning courses, it is just as popular for distributing supplemental learning content outside of the traditional face-to-face classroom.

CMS software products are widely used by colleges and universities to manage and deliver course content via the Web. For example, MIT uses *Stellar*; the University of Michigan uses *CHEF*; and Stanford uses *CourseWork*. These are systems that the universities have designed for their own use and are not available for public download. Universities without adequate resources to develop their own personalized CMS can download and install an open source CMS such as *Moodle*, *.LRN*, or *Sakai*.

Background

Why use a CMS? While there are just as many arguments for and against using a CMS as there are for and against using technology in general, there are three arguments in favor of adopting a CMS that are worth investigating.

The first argument is that a CMS can facilitate instructor creation of constructivist learning tasks and environments. Before outlining the benefits of CMS for language learning, it is helpful to examine the origin of constructivist learning theory. The work of Lev Vygotsky (1978) and Jean Piaget (1972) paved the way for constructivist approaches to learning, which propose that learners actively construct their own knowledge from resources made available to them. The collaborative nature of today's wired environments hold promise for constructivist learning activities. The benefits of networked collaboration appeared early in the Internet boom when USENET was developed as an open and shared forum where people from around the world collaborated for the purpose of learning. More recently, CMS have appeared in every facet of teaching and learning. When crafting language learning activities for or with a CMS, it is helpful to consider learning activities which are based on cognitive and constructivist science. A useful resource is Jonassen's (2007) taxonomy of meaningful learning, which offers a concrete guideline for developing digital material or activities. According to Jonassen, meaningful learning is that which is active, constructive, intentional, authentic, and cooperative. These assumptions encourage instructors to think about CMS as a tool that students learn with rather than a tool to teach with.

A second argument for incorporating a CMS is enhanced multimedia support. Firmly tied to course design and CMS development should be the role of multimedia, and how multimedia can be better used to personalize and customize learner knowledge and experiences. Mayer (2001) attempts to ground research in the area of multimedia in cognitive theory. Based on numerous cognitive studies, Mayer suggests that learners have two separate channels for processing information, one visual and one verbal, and that these channels can become overextended. He argues that multimedia systems can be more effective for learning since they address both the visual and verbal channels. CMS are designed to streamline the sharing of multimedia instructional material as well as integrate text-based activities together with multimedia. Using a CMS to deliver multimedia enhanced learning content may also help to strengthen learner motivation. Astleitner and Wiesner's (2004) model of multimedia learning and motivation offers a useful framework to consider when supplementing language learning activities with multimedia elements.

The third argument for the adoption of a CMS relates to modern society's recent technological advancements. It is now clear that the way in which youths communicate and process information is dramatically changing. Educators need take into consideration the rapidly

evolving digital-age teaching and learning environments expected by 'generation Y' learners. Marc Prensky, a futurist in educational technology, has written extensively on 'digital natives' and 'digital immigrants'. Prensky (2001) argues that digital natives are fundamentally different from digital immigrants and proposes that "students' brains have physically changed – and are different from ours – as a result of how they grew up". Because of fundamental differences between digital natives and digital immigrants in the way they think and process information, teachers need to re-develop old content and instructional styles to better suit today's learners. This doesn't mean that teachers have to reinvent the wheel, but changes in instructional methodology are needed. Prensky offers a few recommendations for changes, such as teaching content at a faster pace, reducing the amount of step-by-step instruction, and giving students more choice of learning activities. Deploying a CMS to serve supplemental course material and activities, particularly collaborative activities, multimedia enhanced activities or educational games, would be a dramatic step towards redefining instructional methodology to better match today's learners.

Selecting and implementing CMS

As CMS become more prevalent, educators need a clear understanding of the realities of balancing learning and management. New Web 2.0 tools such as discussion forums, blogs, wikis, and shared whiteboards have made it simpler to create teaching activities that involve collaborative document creation, multimedia publication, and social networking. However, administrators and teachers must also be sure that the CMS they select can support tasks that center on promoting, rather than discouraging, student learning. In addition, repetitive language practice activities, which often are easiest to develop and deploy, must be structured to be meaningful within the context of the overall course.

For educators and administrators, deciding which CMS product is most suitable for an institution can be an intimidating and formidable task. The suitability of a CMS is determined by the effectiveness of its content and how efficiently learners interact with that content. CMS can support the administration and deployment of collaborative learning activities and tasks, with their main strength being the organization and distribution of content, rather than content creation.

Choosing a CMS requires "test driving" the different tools and administrative interfaces of each product to determine whether all necessary tools and functions required for a given learning environment are included. Some products offer a sand-box, an area for testing applications on line, while other CMS products must be downloaded and installed to determine their suitability. For a helpful comparison of CMS applications, EduTools <www.edutools.info> offers a well-organized community supported website. A review of the most recent articles and research on CMS products is also recommended before making a final decision on which system is most suitable for both student learning preferences and instructional methods.

Kochi University of Technology deployed *Moodle* <moodle.org> as the primary CMS for language instruction in 2004. *Moodle* was chosen as it is one of the leading open-source CMS available (Adkins, 2005). The acronym '*Moodle*' stands for 'Modular Object-Oriented Dynamic Learning Environment'. *Moodle* was developed by Martin Dougiamas and its

design is grounded in cognitive and constructivist science in order to provide more effective pedagogical support in different learning environments (Dougiamas & Taylor, 2003). Before deciding to employ *Moodle*, several alternative systems were investigated, including *LRN* <dotlrn.org>, *Sakai* <sakaiproject.org> and *Webclass* <www.webclass.jp>. In the end, *Moodle* appeared to be the best solution because it is open-source, it is extremely flexible in that it allows us to add and edit modules, and it boasts a large community of users who provide support. An open source alternative appeared to best meet both learner and instructor demands at our language center given the fact that in-house support for administering the system is available and student administration can be accommodated through a single server installation.

Why open source?

Lawrence Lessig (1999), a leading expert on free speech, open source and the right to innovate, provides a straightforward answer; "some architectures invite innovation; others chill it". At Kochi University of Technology, the main motive for adopting an open source CMS was to have the flexibility to edit the code, create new activities, and integrate the system with other applications to complement our current curriculum. While there are many promising CMS applications on the market, some are rather inflexible. A CMS, whether it be open-source or propriety will never possess all of the functions desired, and while *Moodle* has many valuable features, perhaps as many as if not more than proprietary systems, it lacks several features that are important to the success of language learners. Because of *Moodle's* wide user base, vibrant community of developers, and ease of development, it was possible to add the necessary functions to support the language learning activities unique to our institution. One of the main strengths of *Moodle* is the ability to add modules or block to the core application without actually changing the core code. This is extremely important in a CMS in order to ensure the upgrade process goes smoothly. The following section describes some of the limitations of using out-of-the-box *Moodle* for language learning and how it is possible to add modules or blocks to create exciting new language learning activities.

Course management system module development

During a three year period at Kochi University of Technology, 5 modules were either improved upon or developed from scratch in order to enhance the functionality of the *Moodle* CMS. Most of the modules were designed as *Moodle* plug-in modules or as blocks. The modules were mainly designed using PHP, the scripting language that *Moodle* is written in, and MySQL, a popular SQL database engine supported by *Moodle*. In addition to PHP and MySQL, Adobe Flash was used to enhance the multimedia aspects of *Moodle*.

The *Moodle* modules discussed in the following section are being used to support instruction in several ESP classes, for example, Science Lab, Science English, Science Reading, Technical Writing, and Technical Writing & Presentation courses, at Kochi University of Technology. The modules were installed on the department's onsite course management server running Linux *Redhat Enterprise* and *Moodle* 1.8.4. All of the modules are open source and can be downloaded from <blog.netcourse.org/>.

Improved media support

The *Moodle* blog module was redesigned to allow students to upload a greater variety of media files to a course blog using a mobile device. With the current version, text, images, sound, and video files can be uploaded by mobile phone or via a web browser and displayed on a student's blog site. The original mobile blog module was implemented three years ago and was successfully integrated into the English curriculum with 400 students enrolled in first year English courses. Students are able to upload files to the course system using mobile device such as a mobile phone. Students have since uploaded over 10,000 images along with English descriptions of images depicting their daily lifestyles. The collection of blog images and entries is an example of authentic student-produced content that can be used in future learning activities.

In 2007, the system was improved and several new multimedia plug-ins were added. The new media blog module allows for text and video uploads, and also audio file and video file uploads. Using the audio/video conversion tool, the module now supports thumbnailing of any uploaded video file. Typically, mobile phones can upload video format in 3GP format, which is a multimedia container format used with 3G mobile phones. Since 3GP is a simplified version of the MPEG-4, the video content can easily be played back using a browser plug-in such as *QuickTime*.

In addition to the audio and video upload functions, students can also record and save audio files directly to their course blog using a standard browser and Adobe Flash Player. This new media function allows learners to create voice boards by easily embedding voice interactions into a web page. Using this technology, teachers or learners can set up podcasting activities within the *Moodle* CMS.

The voice recording technology was designed using *Actionscript*, PHP and the *Adobe Flash Media Server*. A simple Adobe Flash object, as seen in the illustration below, is embedded into an html page. Students can record and play back their voices by clicking on the record and play buttons. Once they have a satisfactory recording, they save the file. The audio files are saved as a Flash FLV files using *Adobe Flash Media Server* and can be played from within the CMS as streamed media. Students also have the option of recording their voice on an external recorder and uploading an mp3 file to their blog. In order to use this module, *Flash Media Server* needs to be installed. An Open Source alternative to *Adobe Flash Media Server* for recording and streaming Flash files is Red5. Figures 1 and 2 below show a sample student blog.



Figure 1: Browser-based voice recorder and media file upload field.

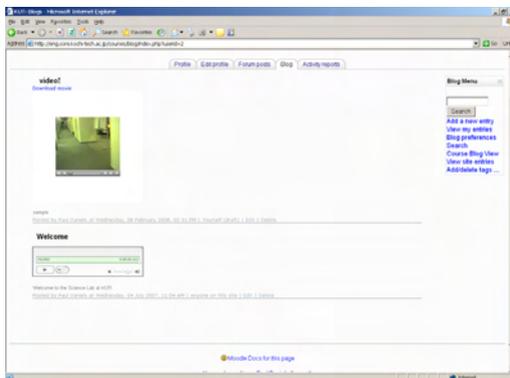


Figure 2: Video and voice blog entries

Presentation module

While many instructors use *PowerPoint* presentations to supplement their lectures, it is not necessarily the best medium for distributing content online. *PowerPoint* files are often several megabytes in size, require proprietary software for viewing, and are not efficient in maintaining the file structure of external sound or video files. The presentation module was designed to automatically convert Microsoft *PowerPoint* files to Adobe Flash format after the files are uploaded to *Moodle*. Users can upload their presentations and add comments to each others' presentations and attach multiple choice questions to their presentations. In addition, teachers can attach existing *Moodle* course quizzes to uploaded presentations. Converting *PowerPoint* to Adobe Flash is beneficial as it allows for more accessible learning content. *PowerPoint* is proprietary software, whereas Adobe Flash player is free and Gnash is a GNU Flash movie player. In addition, the Flash file size is considerably smaller than the *PowerPoint* file making presentations easier to distribute via the web.

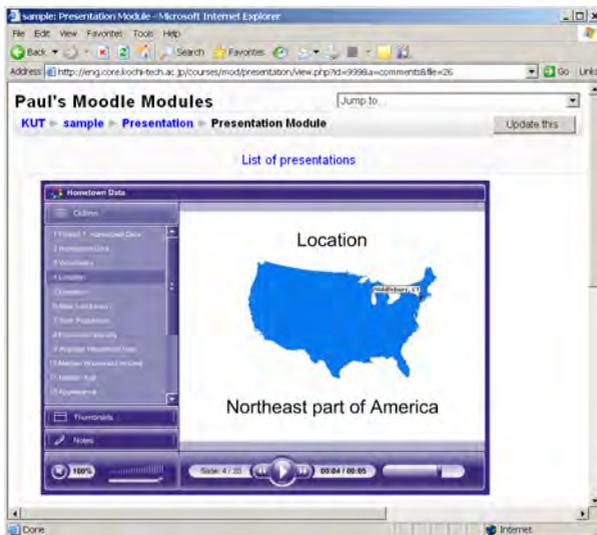


Figure 3: A PowerPoint file displayed in an Adobe Flash environment.

Text analysis module

While some learners or educators may be critical of the use of computerized text analysis to assess student writing, recent research supports the validity of computer-scored writing activities (e.g., Laufer & Nation, 1995; Goodfellow, Lamy, & Jones, 2002). More recently, a software application called *e-Rater*, developed by the Educational Testing Service is used to score GMAT essays. The practice of using computers to rate essays is relatively new, but it is a promising approach. Computerized text analysis will not replace human raters; rather it can be used to complement the human rating process.

The text analysis module analyzes student-produced text in a Moodle forum, blog, chat, or journal. Student data can easily be collected and analyzed by a single click of a button. Text data, such as total word count, total unique words, number of sentences, words per sentence, hard words, lexical density and a Fog index, can be downloaded as a CSV file and imported in Microsoft Excel. This module can be used to assist instructors with the tedious aspects of writing assessment. It can also be incorporated as a self-monitoring task for student writers.

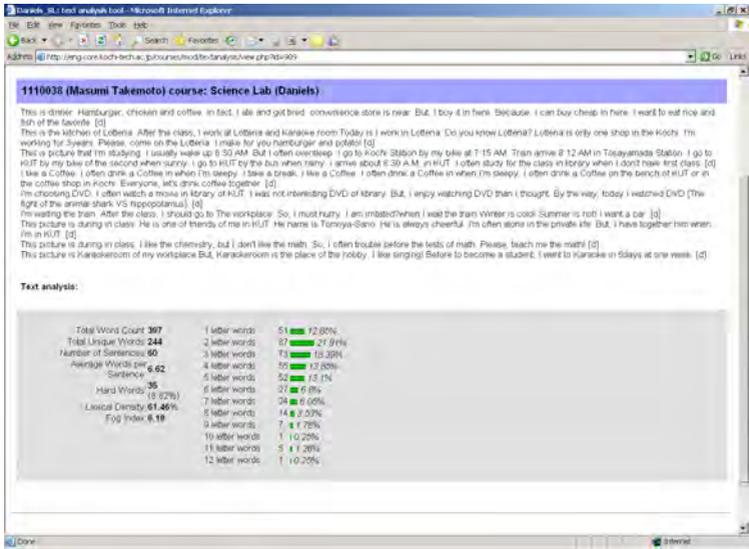


Figure 4: Sample analysis of a first year student's writing

Mail quiz module

Using the email quiz module, students can sign up for a study topic and receive content and quiz questions via a user-defined email schedule. The script also tracks correct/incorrect responses and average quiz scores. This module is currently being used to introduce TOEIC vocabulary to students studying for the TOEIC exam. The study content includes the first 1,000 most frequently used TOEIC words with definitions and examples in both Japanese and English, and multiple choice vocabulary quizzes, all of which is sent out to students' mobile devices.

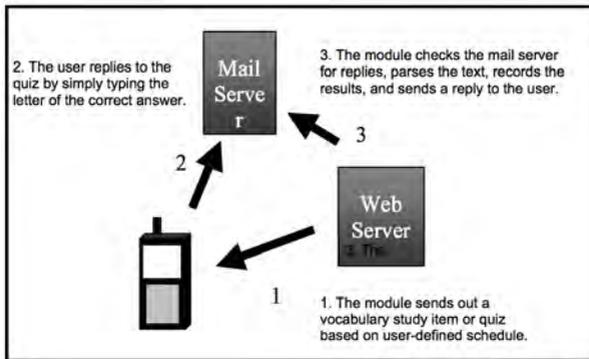


Figure 5: Mail Quiz backend

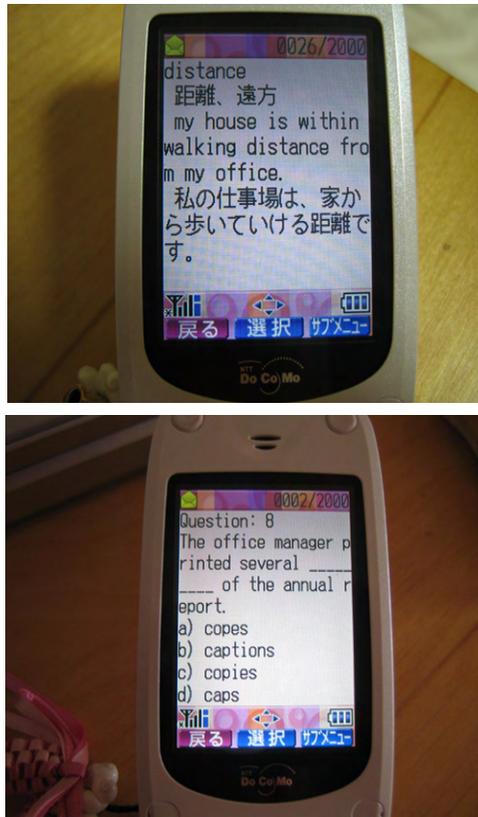


Figure 6: Mail Quiz study content and multiple choice quiz viewed on a mobile phone.

Digital white board module

Organizing or structuring ideas using concept maps is argued to be an effective means (Novak, 1990) for learners to construct their own knowledge. Because of Moodle's social constructivist design, a shared digital white board complements Moodle's design as well as the aims of constructivist language learning curricula. The digital white board module allows students and teachers to work together to create objects or write text on a shared digital whiteboard. Students can work in groups or individually within a course. It can be used, for example, for students to collaboratively create knowledge maps, collaborate on projects, or take group notes. This module requires Adobe Flash Media Server.

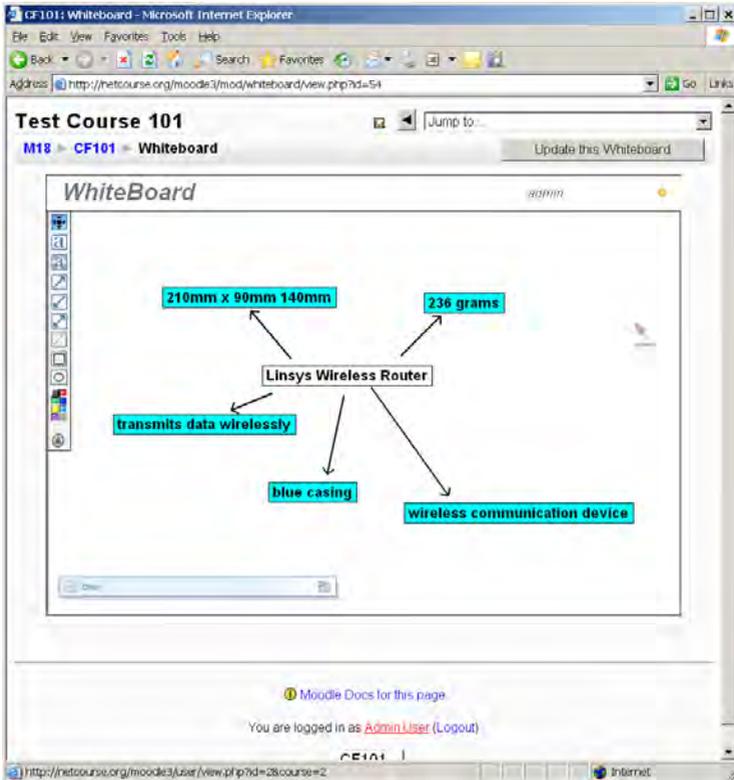


Figure 7: Adobe Flash-based shared digital whiteboard.

Student survey module

Moodle has a very effective survey module which allows instructors to collect data on student perceptions towards the quality of online coursework, but it doesn't allow individual students to create their own surveys. The tasks involved in survey projects, such as collecting, analyzing and reporting on data, work well in the social constructivist classroom. The survey module allows students to both create and administer multiple choice surveys from within a Moodle course.

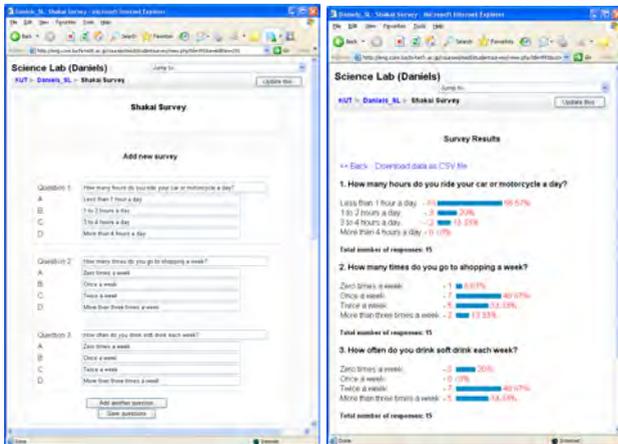


Figure 8: Student survey creation form and survey results page

Future directions

The small sample of modules described here suggests how open source CMS can be improved to better serve a specific instructional setting. The future of CMS design will continue to shift in the direction of allowing the instructor more control over the design and function of the software, rather than trying to adapt developers' designs into a curriculum. Open source systems will lead the way with extendible base cores that allow simplified methods of adding modular activities such as the ones described above.

Another important element will be the mobile platform. Typically most CMS are designed to be accessed over a standard web browser. As mobile devices become more powerful and are able to run standard web browser software such as the Apple *iPhone's* Safari browser, learners will be able to interact seamlessly with learning content and activities both on and off campus. Several initiatives are already in progress to serve mobile learning content to mobile devices, especially in Asia, where mobile phone use outweighs personal computer use.

Content and activities can be labeled and shared as learning objects. These are reusable bits of information or activities that can be tagged and adapted to provide instruction to different learners in different environments. Wide recognition of the notion of learning objects and their integration with a wide range of CMS could lead to more individualized and productive learning experiences. While learning objects may not make any significant progress in the next decade, progress is expected in the creation of learning objects or activities that can be labeled with metadata so that they can be shared across a number of competing CMS. For example, it is now possible to share SCORM compatible content or lessons between *Moodle*, *Blackboard*, *WebCT*, *ANGEL*, and *eCollege*. As tagged learning content becomes more easily accessible and sharable across platforms, digital repositories will possess a greater degree of usefulness.

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Key Terms & Definitions

- Generation Y refers to individuals born from 1980-1995, who are also referred to as *digital natives* because they grew up surrounded by digital technologies.
- Web 2.0 is a term used to describe the new collaborative features of the Internet.
- PHP is a server-side HTML embedded scripting language
- MySQL is a popular open source SQL database server.
- MPEG-4 is a newer compressed video standard used to deliver video over the Internet.
- 3GP is a simplified MPEG-4 video standard commonly used for video with mobile devices.
- FLV are Adobe Flash video files. Most notably, *YouTube.com* uses Flash Video.
- SCORM Sharable Content Object Reference Model is standard that packages learning content to be transferred or shared between various web-based e-learning systems.

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Paul Daniels is an Associate Professor of EFL at Kochi Institute of Technology in Japan. His research involves educational technology and content-based instruction. He has been actively developing activity modules for language learners and teachers that can be used with the Moodle course management system.