

Integrating Blended Learning into the Language Classroom

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Introduction

Technology in the classroom has become well established in Western higher education and in Japanese businesses; however, only recently have Course Management Systems (CMS) in Japanese higher education gained popularity, in part due to government policies (Tuzi, 2006). Using a CMS can be done in a variety of ways from accessing a virtual classroom without face-to-face interaction to providing it as a space of supplementary learning for classes held on college grounds. As teachers, it is critical to ask how a CMS can be most effective in language education to avoid using the CMS for technology's sake. Research in computer assisted language learning (CALL) has shown that successful use of technology comes from "teachers' efforts in coordinating learners' activities (Belz, 2003; Muller-Hartman, 2000), structuring language and content learning (Levy, 1997), and helping learners to reflect critically on language, culture and context (Kern, 2000; Ware & Kramersch, 2005)" (Kern, 2006: 200). For this paper, an explanation for effectively incorporating a CMS, Moodle, into campus-based classes will be described, including a discussion of its adaptability for classes of varying levels and its convenience for independent learning. In order to avoid the pitfall of using it for technology's sake, this article will guideline when and how to adapt face-to-face materials for online classrooms as well as give details of exercises that complement in-class activities.

What is blended learning?

The president of Pennsylvania State University, Graham B. Spanier, says

that the implementation of e-learning into the traditional classroom is “the single-greatest unrecognized trend in higher education today” (Young, 2002, ¶ 12). Therefore, it is no surprise that buzzwords describing the use of technology and computers in the classroom, such as ‘web-assisted’, ‘online’, and ‘hybrid’, have increased with the rising popularity of CALL. The term ‘blended learning’ is one of several being used as more teachers and institutions incorporate computers into the curriculum. However, how is blended learning defined? For many, blended learning is the combination of both traditional materials and methods with computer-mediated communication (CMC). That is, teachers and students are still using notebooks, textbooks, and blackboards, in conjunction with computer technologies, such as course management systems, online activities and resources, software, e-mail, and blogs. This marriage of traditional teaching and new technologies can be seen in Figure 1.

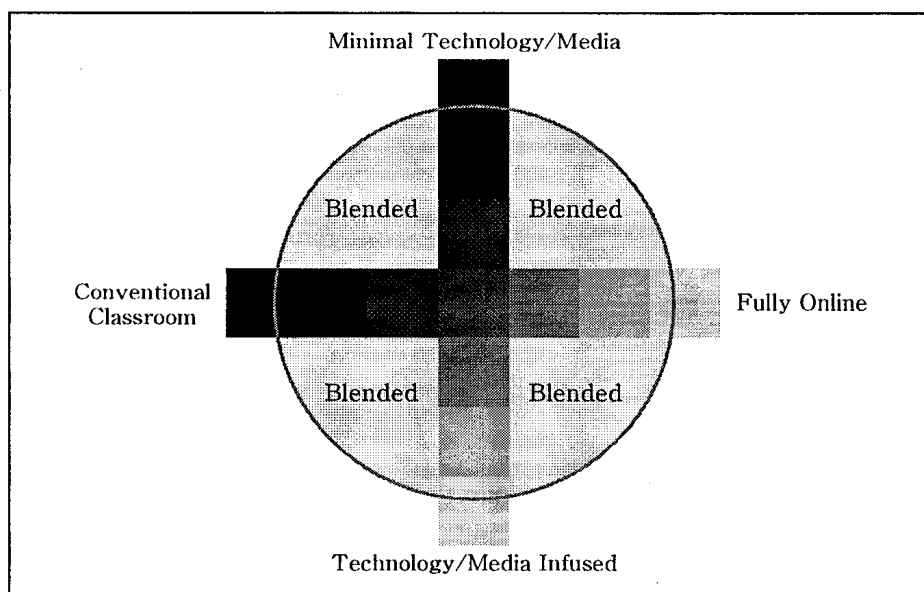


Figure 1 : Broad Conceptualization of Blended Learning (Picciano, 2007).

Understandably, blended learning can be “an elegant solution to the challenges of tailoring learning and development to the needs of individuals” (Thorne, 2003: 16), which is essential for teachers in classrooms with students of varying language abilities. Learning materials that are too easy or difficult (± 100 points on the TOEIC test) can reduce the learning

effect by half (竹蓋&水光, 2005: 185). Therefore, instructors need to create a wide range of activities geared to both lower-level students as well as those who are advanced. Although blended learning can be a great benefit, mixing traditional instruction with computer-mediated instruction alone cannot guarantee its success.

A successful blend must begin with an evaluation of the learning environment. For this paper, the courses took place at Kobe Kaisei Women's College, and were taught by the authors of this paper. At Kobe Kaisei Women's College, the students have access to computers in three different labs. Also, the school promotes itself as having a low student-teacher ratio, and the curriculum is designed with small classes in mind. The teachers chose to add the technology of an open-source CMS, Moodle, for several reasons. First, because it is open-source, it is free to download, which helped to keep costs to a minimum. Moodle was also created with the approach of social constructionist pedagogy in mind (Moodle, 2007), so it includes many learner-centered functions. The CMS could also be adapted incrementally, beginning with a few blended activities and moving on to broader curricular development. Moodle was incorporated into the following classes: Oral Communication for sophomores, TOEIC Courses, Computer Communication, and TESOL.

Adaptability for multi-level classes

In some classes, students' English abilities can vary greatly. To give an extreme example, Figure 2 shows the TOEIC scores of the students at the beginning of the TOEIC Intermediate course in the fall of 2006. The line graph shows each student's score, and the figures on the right indicate the TOEIC scores. The average score at that time was 534. The bar graph indicates the student's score minus the average score. Notice that the difference between the highest and lowest score is nearly 400 points. In a multi-level class like this, where an estimated average level of activities may be suitable for only a small part of the class, "blended learning represents a real opportunity to respond more effectively to an individual" (Thorne, 2003: 37).

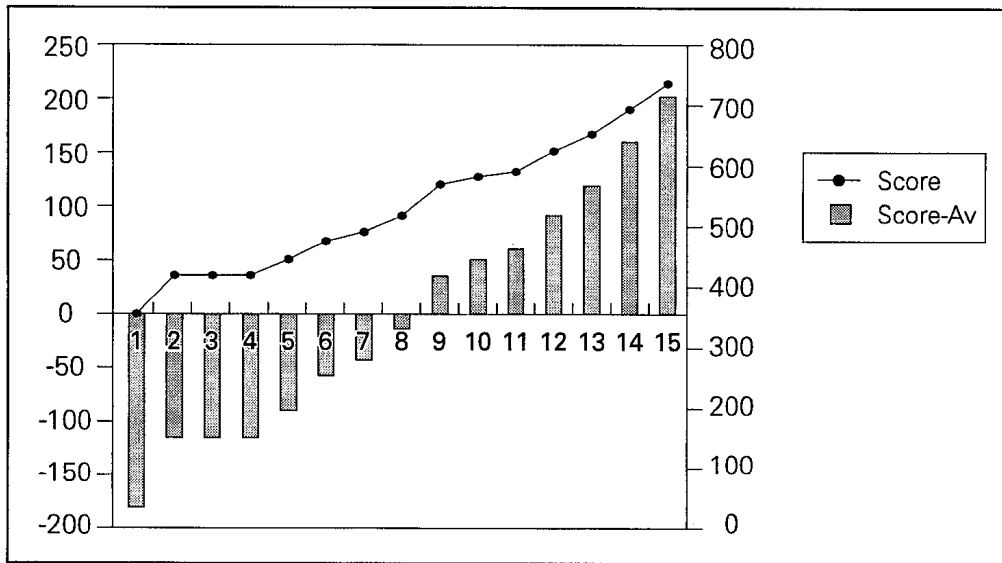



Figure 2 : Result of TOEIC IP (July, 2006); Average = 534 (N=15)

Thorne goes on to say, “The very nature of the blend builds in flexibility” (2003: 37), and providing choices of varying levels of activities in a blended learning environment can be managed more easily using a CMS. One possible way to organize learning activities is to first take time for synchronous instruction. For example, teachers can assign the entire class common tasks dealing with thematic sets of vocabulary, grammar points, learning strategies, and study skills, for instance, and then give the students time to learn asynchronously and independently (online quizzes, web search, and forum posts), encouraging them to choose sensibly what they need to practice and to pace themselves. In the experience of one of the authors, this has worked quite well in multi-level classes. The situation where some students have completed the work with nothing more to do while others still need a lot of help with the same task can be easily avoided. The adjustable delivery of content, facilitated by the CMS, motivates advanced learners since giving extra exercises or more challenging tasks can help maintain the interest of stronger students. In addition, teachers can effectively help weaker or shier students by communicating one-on-one during the asynchronous learning time.

Encouraging independent learning with a CMS

Among many advantages of delivering learning objects online is providing hints or explanations that are accessible when needed. An easy way to do this is with a mouse-over pop-up box that appears when the mouse is placed over a particular letter string. In Figure 3, for example, when you put the mouse over the string “checkout counter”, the Japanese translation of the phrase appears in the small pop-up box. Another way is to add hyperlinks so that students can see hints or explanations by clicking on specified strings or objects. Including these as-needed hints helps students to continue working even when encountering difficulty. Furthermore, letting them choose to view the hints or not increases their responsibility, which is expected to promote learner autonomy.

2
Marks: 1



There are two ____ waiting at the checkout counter.

Choose one answer.

a. customers
 b. butchers
 c. cashiers

Figure 3 : An example of a pop-up hint

Using the CMS, Moodle, makes it far easier to offer choices of activities and resources than paper-based materials. The flexible delivery facilitates meeting individual needs and encourages independent learning by allowing students to choose what they need to do and to study at their own pace. Moodle exercises can be given as homework as well as independent in-class activities. While some students may finish a quiz, review it taking notes, and then go on to attempt another within a given amount of

time, others may take longer as they check the feedback for each question or get clarification from the teacher. Yet, the stronger students' focus on the lesson's objectives can be maintained by offering an extra choice of more challenging activities that can be done independently with the CMS. On the other hand, students who need more time can also save their work and resume their latest attempt whenever they like.

Instant feedback is also expected to encourage independent learning by helping students to better understand content and to monitor their own performance. Both the quiz and lesson modules of Moodle display feedback immediately after each attempt. As shown in Figure 4, the review section of a quiz/lesson automatically shows the date of the attempt, the score, and the time spent. In addition, useful explanations can be included in the feedback so that students can immediately understand what kind of mistakes they have made. Also, using simpler question types available with the Moodle quiz module, such as multiple choice

The screenshot shows a Moodle quiz review interface. At the top, the breadcrumb trail is "ESL > CC > Quizzes > Fear > Review". The main heading is "Fear" followed by "Review of Attempt 1". Below this, a table-like structure displays the following information:

- Started on: Friday, 19 October 2007, 11:04 PM
- Completed on: Friday, 19 October 2007, 11:05 PM
- Time taken: 1 min 20 secs
- Raw score: 8/10 (80 %)
- Grade: 8 out of a maximum of 10

The question being reviewed is a multiple-choice question with the following text: "3 Spiders _____ my sister a lot. She starts crying when she finds a picture of a spider." The marks for this question are 0/1. To the left of the question, there are two small illustrations: a spider on a vertical line and a cartoon character with a large black circle for a head, looking distressed. Below the question, the instruction "Choose one answer." is followed by four radio button options:

- a. terrify
- b. anxious
- c. afraid
- d. frightened

To the right of the selected option "c. afraid", there are four lines of Japanese text providing explanations for each option:

- ◎「物事 terrify 人」
- *「人 be afraid of 物事」
- *「人 be anxious about 物事」
- *「人 be frightened of/about/at 物事」

Figure 4 : Instant feedback (the review section of a quiz)

and true/false, along with the instant feedback function, is particularly helpful for prompting lower students to study.

Moodle can also promote self-monitoring and autonomous learning as students are able to easily check their learning history. As shown in Figure 5 (A), students can see at a glance what exercises have been done and their score. When they are not satisfied with previous performances, they may try again to get a higher score, as illustrated in (B). Thus, the learning history function serves well for learners to track themselves.

TDEIC > Quizzes		
Topic	Name	Best grade
10	Vocab: Education 1	9.9 / 10
	Grammar: to DO/DOing ★★☆☆	14.4 / 15
	to DO/DOing ★★☆☆	
	to DO/DOing ★★☆☆	
	Review 01	8.75 / 10
	Vocabulary Management 1	9.5 / 10
	Management 2	
	Grammar: to DO/DOing 2 ★★☆☆	10 / 10
	to DO/DOing ★★☆☆	13.33 / 15
	Mixed ★★☆☆	8.67 / 10
	Parts of Speech 1 ★★☆☆	13 / 15
	U13 Listening:	
	Listening ★★☆☆	

ESL > TDEIC > Quizzes > Parts of Speech 1 ★★☆☆			
Parts of Speech 1 ★★☆☆			
名詞・形容詞・副詞の区別を中心に。			
Attempt	Completed	Grade / 15	
#1	Saturday, 20 October 2007, 12:06 PM	10	
#2	Saturday, 20 October 2007, 12:17 PM	14	
#3	Saturday, 20 October 2007, 12:20 PM	15	
Average grade: 13 / 15.			

Figure 5 : Learning history

Finally, using online forums and message boards, which is a great way to share student-created content, can facilitate independent learning in several ways. First, since everything posted online is always available to course participants as long as the administrator or teacher wants to keep it there, students can learn not only from current classmates' assignments,¹⁾ but also from previous students' work for the same course. For example, some TESOL learners took it upon themselves to read the previous students' forum posts about their feelings and thoughts after finishing their first teaching experience in front of the class. These posts helped those currently enrolled to get a clear image of what teaching in front of the class can be like. Second, when using the Moodle forum for a writing task, learners can share their examples without a delay in time, and stu-

dents can benefit from each other's work instantly. They do not have to wait for the teacher to collect the papers, make copies and redistribute them. This can help to give some learners new ideas for writing, and more importantly, stronger students' work can serve as a useful sample for weaker students.

Considerations for less-independent learners

Some students' language abilities can be quite low, and those at lower levels can find it quite difficult to solve a simple word-order quiz, as seen in Figure 6. From the words provided in the quiz, students created the following sentences: *Looking is Kate for you* (cf. 1), *He put those on the desk books*(cf. 4), and *This takes to bus you the station* (cf. 5).

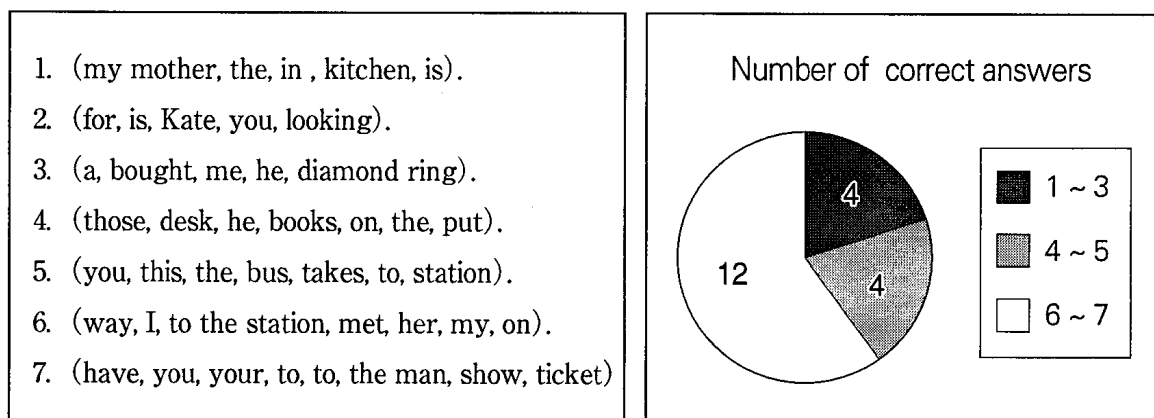


Figure 6 : A word order quiz and its result in the TOEIC basic course (July, 2007; N=20)

While blended learning has proven to be a flexible way to deliver information, assign activities, and manage content, this flexibility in itself might hinder lower students as “[o]nline learning components often require a large amount of self-discipline on the part of the learners” (Bonk & Graham, 2005: 15). The more learning objects that are delivered and the more choices that are given may overwhelm weaker students, which can inhibit their ability to make good use of blended learning. By trying to tailor materials to the individual, the result may be that weaker students will find it complicated to navigate though the broad range of choices. In fact, some students of the TOEIC Basic course in the spring semes-

ter of 2007 said they were often at a loss for what to do, while most students were quite capable of appropriately choosing from the blended learning activities of the kind mentioned above. Yet, perhaps the weaker students' difficulty with using the CMS stems from their not having developed basic learning habits, including organizing learning materials, or monitoring their learning as their responses to the survey questions given at the end of the term suggest (Fig. 7 & Fig. 8).

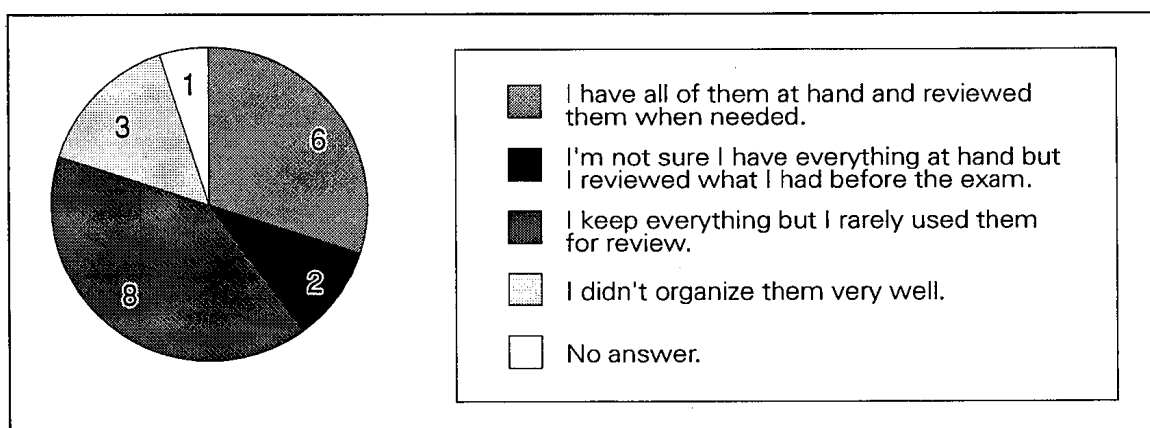


Figure 7 : "Did you organize all the handouts given in class for review?" (N=20)

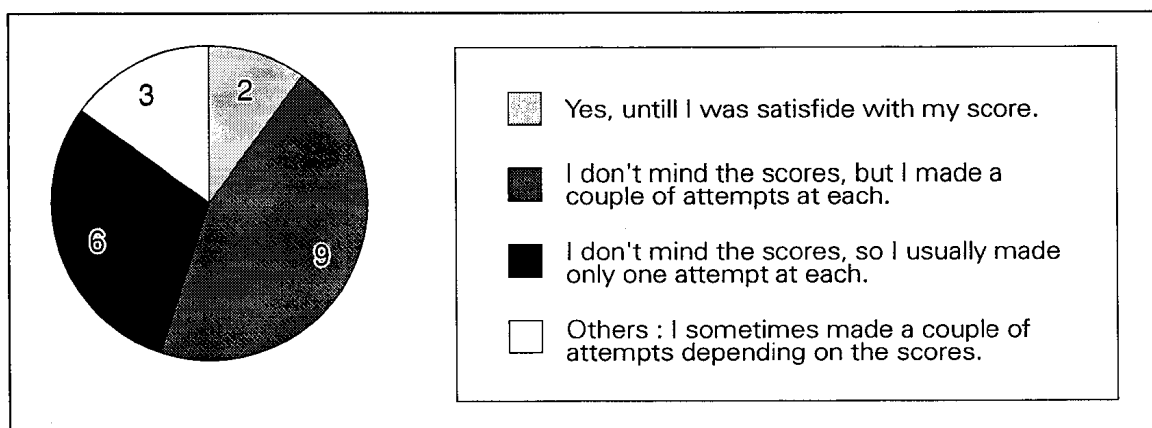


Figure 8 : "Did you make multiple attempts at online quizzes?" (N=20)

In order to effectively help those less independent students take advantage of a blended-learning setting, consideration of many different aspects is required, such as helping them to learn basic language points, streamlining activity choices, assigning smaller steps, and giving explicit guidance.²⁾ Below are some of the tactics adopted to meet these requirements.

First, using hand-written activities on worksheets (e.g. creating semantic maps, gap-fill exercises and word order quizzes), combined with related exercises on Moodle, can be an effective way of helping weaker students learn basic language points, such as vocabulary and grammar (Fig. 9).³⁾

(A) Part of a worksheet

The worksheet contains several sections:

- Review 01:** A matching exercise with a table. The first column has phrases like 'wall', 'office', 'turn the copier', 'turn the computer', 'lock the safe'. The second column has Japanese terms like 'コンセント', '用品・設置', '消す', 'つける', ''. The third column has phrases like 'set the', 'receive a', 'the button', 'the battery', 'double the size'. The fourth column has Japanese terms like '警報機', '通知・注意', '押す', '充電する', ''.
- Step 2 (1)(2)(3):** Reading comprehension questions about 'how'.
- Grammar:** A section titled 'Grammar: 形容詞と副詞' with examples like 'Extreme heat can cause serious illness' and 'If it gets extremely hot, you can become seriously ill'.
- Part 5:** A table of verb forms and their Japanese meanings, such as '(careful/carefully) handling' (慎重に取り扱う), 'a (sudden/suddenly) movement' (突然の動き), '(constant/constantly) improvement' (定常の改善), and '(automatic/automatically) calculation' (自動計算).

(B) Moodle outline view

The Moodle outline view shows a hierarchical structure of activities:

- 2 10/11 - U11 Office Equipment**
 - Part 2: Howを使った疑問文
 - Part 3: 手順の説明
 - Part 7: 取扱説明書・注意書き
 - Grammar: 形容詞と副詞
 - Review 01
 - Vocab 1 ★☆☆
 - Vocab 2 ★★☆☆
 - Part 2 ★★☆☆
 - Part 3 ★★☆☆
 - Grammar ★★☆☆
 - Part 5 ★★☆☆
 - Part 7 ★★☆☆
 - Vocab 3 ★★☆☆
 - Adverb or Adjective? ★★☆☆
 - Word Forms ★★☆☆
- 3 10/18 - U12 Entertainment**
 - Part 3 娯楽・レジャー

Figure 9 : Combined use of a worksheet and Moodle

Second, to narrow down and streamline the range of choices for the TOEIC Basic course, exercises are roughly classified into four categories including: common tasks for everyone, optional basic tasks, optional intermediate tasks, optional advanced tasks. As illustrated in Figure 9 (B), these categories are explicitly indicated on Moodle by the number of stars (one = easiest, three = difficult), and the position of each learning object (in (B), those indented are optional tasks). Also, teachers can streamline activity choices by scaffolding paper handouts to match the arrangement of the Moodle activities. It is recommended to keep the formats of the worksheet and the Moodle outline as consistent as possible throughout

the course.

Third, using the Moodle forum or blogs for writing activities can be an effective preparatory step to paragraph writing because posting to a forum/blog with images allows even those with limited English ability to create a nice piece of work, as illustrated in Figure 10. This will give them a sense of achievement, which helps motivate them to make other posts using English. In addition, some blog hosts, like Blogger, allow you to post from cell phones, which is also expected to encourage autonomous writing.

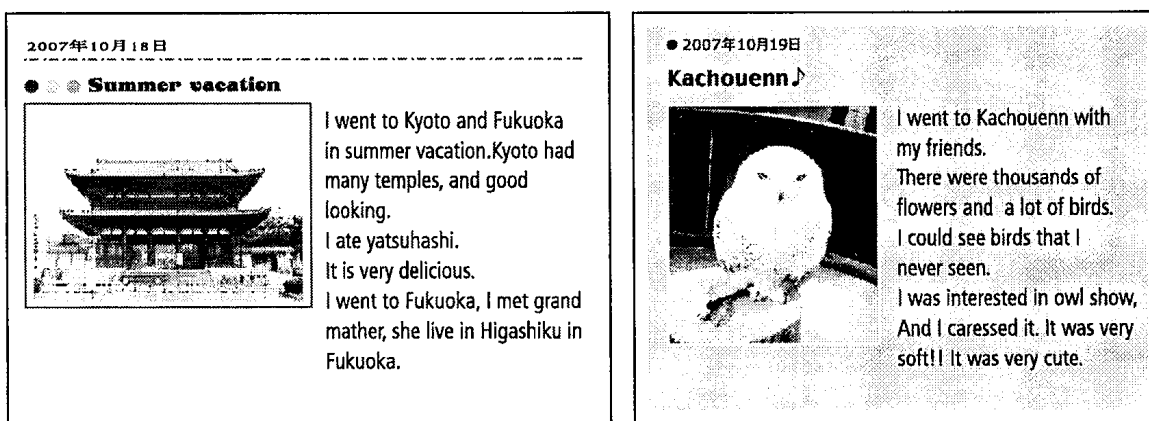


Figure 10 : Students' blog posts

Considerations for motivating learners

Teachers can also maintain or increase the motivation of independent learners with a CMS. For example, additional materials can be provided to students who are interested in autonomously learning more. Additional web pages about topics discussed in the face-to-face classroom can be added as a resource on the Moodle site. Students can then browse this information at their leisure. These external links can also provide content for lessons and class materials. In the Oral Communication course, the class was assigned a reading book, and a major setting of the novel was Ellis Island. Therefore, the teacher combined a virtual tour of the site with a lesson in Moodle. As learners toured the landmark online, they were able to view historical photographs and to better understand the main character's circumstances as she experienced living there in the

past. By seeing the book's setting for themselves, students were able to construct more background knowledge, which improved their understanding of the text. In addition, students integrated knowledge between the two learning objects, the virtual tour and the novel. Figure 11 is a screen shot including a question from the lesson in Moodle with the virtual tour's website. Students were asked to compare the main character from the book to information about a person mentioned in the tour. By challenging learners with the higher-cognitive task of synthesizing information, they maintain focus and interest in the exercise.

Figure 11 : Ellis Island Virtual Tour Lesson Assignment

Additionally, audio files may be added as support for independent learners. For instance, the Oral Communication teacher chose to record pages of the reading book and store the files as a resource in Moodle. Then, students interested in pronunciation of new vocabulary and sentence intonation could easily access those files and read along with the book. An additional benefit of these files was the context they helped to create, as learners were able to hear the characters' emotions and feelings.

Increased communication with the teacher/each other

In 2000, Salmon described the development of computer-mediated communication (CMC) in five-stages: access and motivation, socialization,

information exchange, knowledge construction, and development, where students use the technology for personal goals and reflection (Kannon & Miller, 2004). Teachers who want to increase the students' ability to communicate through computers and the students' opportunities for using English outside of the classroom have several options when using a CMS.

One feature which increases socialization and information exchange through interaction is the instant messaging function. Here, a teacher can make comments or give advice on a student's assignment, which can keep the student motivated. Also, learners can send a message to the teacher asking for clarification on an assignment, or to begin a conversation while both are online. Another place for additional contact is in the Moodle chat room. During a week-long holiday, the Oral Communication class was given the opportunity to voluntarily participate in a chat that took place during the regularly scheduled class time. One student used this chance to ask about studying abroad and to prepare for the experience. This aided the student and demonstrated her development in CMC.

The forum module also allows for increased communication outside of the classroom, and it is important for teachers to illicit more participation by asking pertinent questions (McKnight, 2000; Roper, 2007). After tracking participation in the advanced Oral Communication course, it was found that students responded to the teacher's questions roughly 50% of the time, as seen in Figure 12. Therefore, teachers who want increased student participation need to ask additional thought provoking questions that expand

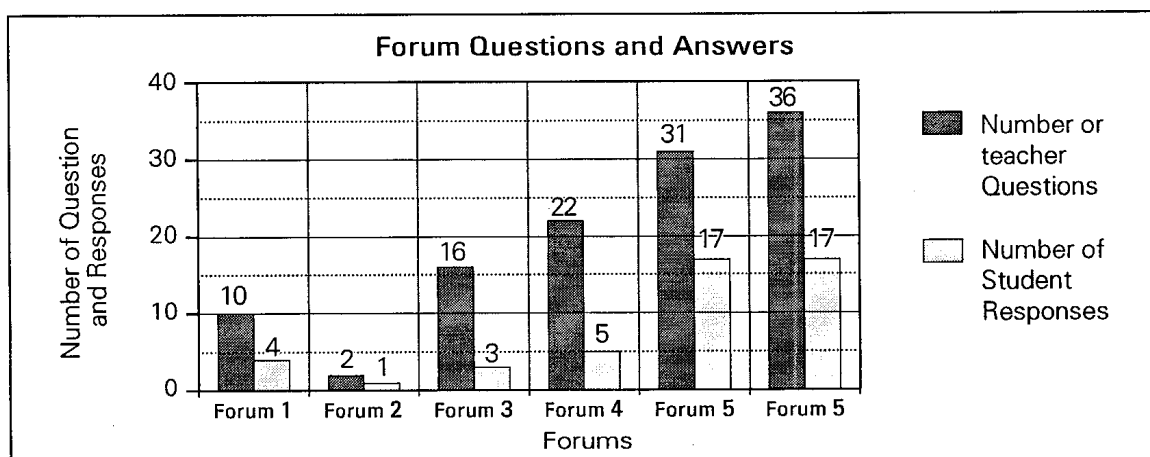


Figure 12 : Ellis Island Virtual Tour Lesson Assignment

on the topic.

The assignment module can also be used creatively to help students learn from each other and to exchange information. An example of this is the online assignment, Lori's Question Café. Students are required to privately ask a question, any kind of question they like. Then, the teacher reads and answers each question. Those questions and answers that everyone may benefit from are then posted in the Latest News forum with complete anonymity. This allows students with less confidence to ask questions comfortably, while still contributing to the education of other students. Additionally it can contribute to the relationship between the student and the teacher as the assignment provides for confidential interaction without the possibility of being judged by other students.

Creating opportunities for learning outside of the physical classroom

Although education is traditionally thought of as taking place in a school or place of instruction, a CMS can offer various experiences outside of the classroom, freeing the class of time or place restrictions. For example, a class that is studying a particular topic may profit from visiting a museum or site related to that topic. That was the case for the Oral Communication class, which focused on global issues throughout the term. Although Liberty Osaka Human Rights Museum, which dedicates itself to the discrimination of a number of groups in Japan, is close to the campus, it proved difficult to organize all of the students' schedules for a synchronous tour. Rather than miss the opportunity to learn from the exhibits, the students were asked to visit the museum at their convenience within a three-week period. During the tour, learners needed to fill out a paper handout that required them to find facts about each discriminated group in the exhibits. Afterwards, students were given an online assignment in the CMS that required them to describe their experience at the museum. By using the CMS for the follow-up questions, students were able to immediately express their ideas and reflections, without having to wait for the next face-to-face class to share their views and

opinions.

Learning outside of the classroom can also come from former students. For example, as mentioned previously, the Oral Communication course focused on global issues topics, one of which was ecotourism. When the teacher learned that two students who had previously taken the course participated in an ecotour in Bali, where they volunteered with children, the students were asked to talk about their experience with the current class. Unfortunately, the former students' schedules conflicted with the face-to-face class time. As an alternative solution, the two students were asked to create a slide-show presentation on the computer, and then that presentation was shared with the current students in Moodle. Ultimately, the use of the CMS enabled the class to learn about ecotourism in a more personal way as fellow college students shared their experiences.

Conclusion

Ultimately, the authors found a few guidelines that teachers can consider before adapting face-to-face materials into a CMS. If media will enhance the context and realize a variety of learning styles, using a CMS is recommended. Additional audio files for reading books and mouse-over hints are examples of this and are options that cannot be done easily in a traditional classroom. The useful explanations teachers can include in the immediate feedback in several Moodle modules, such as in quizzes and lessons, give students a better understanding of their errors at the time of the mistake, which is an advantage of using Moodle. As students grow comfortable with computer-mediated communication, they are able to express themselves in different ways than in the face-to-face classroom. This adds new dimensions to the teacher/student relationship and can encourage the use of English outside of the classroom. The CMS facilitates learning that goes beyond time and place, freeing the class of restrictions. This was the case for the tour of the Human Rights Museum and the Bali ecotourism presentation. Undoubtedly, organizing and redrafting materials is done more easily on the computer. With the variety of skill

levels and English abilities in some classrooms, a CMS is a feasible way to manage a large amount of class content and grades.

Notes

- 1) For an example of using Moodle's forums for assigning writing tasks, see 山内 (2007: 134-135).
- 2) The importance of explicit guidance for those less independent students is briefly discussed in 山内 (2007: 138-139).
- 3) Worksheet content should be gradually changed to encourage students to take notes more independently at a later stage.

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