

JALT2007

Challenging Assumptions
Looking In, Looking Out

Using a CMS, Moodle, in campus-based teaching

Lori Rink

Mari Yamauchi

Kobe Kaisei Women's College

Reference data:

Rink, L. & Yamauchi, M. (2008). Using a CMS, Moodle, in campus-based teaching. In K. Bradford Watts, T. Muller, & M. Swanson (Eds.), *JALT2007 Conference Proceedings*. Tokyo: JALT.

Blended learning, the integration of technology into face-to-face classes, is increasing throughout higher education. Many institutions and instructors are incorporating computers into the classroom with a course management system (CMS). Using a CMS can be done by accessing a virtual classroom without face-to-face interaction, or by providing it as a space of supplementary learning for classes held on college grounds. Yet, it is important to ask how can teachers use a CMS most effectively? This paper will describe how two teachers integrated Moodle, an open source CMS, into a number of language classes to address issues such as varying class levels and motivating students. Justifications for utilizing the CMS rather than paper-based materials will be provided as well as descriptions of activities that enhanced the learning experience. Additionally, ideas for teaching study skills specific to a CMS, such as organizing electronic information and managing time, will be described.

対面授業にテクノロジーを組み込む Blended learning が高等教育において広まりを見せており、多くの教育機関や教員がCMS (course management system) を利用した教室でのコンピュータ活用を始めている。CMSは対面でのやりとりを伴わない遠隔授業にも、また大学での授業の補習の場としても利用できるが、教員は、どうすればCMSを最も効果的に活用できるだろうか。本稿では、2人の教員が、クラス内の学力格差や、学生の動機づけといった課題に取り組むために、どのようにオープンソースのCMSであるMoodleを語学の授業に組み込んだかを説明する。紙媒体の教材と比べたときのCMSの利点を明確にしなが、学習経験の質を高める活動について説明する。加えて、オンライン情報の整理や時間管理など、CMSの利用に関わるスタディ・スキルの指導について考察する。

Context for blended learning

The authors of this paper, two language teachers at Kobe Kaisei Women's College, chose to blend materials with Moodle, an open source course management system (CMS). Moodle was created with social constructionist pedagogy in mind; therefore, "how each participant in a course can be

a teacher as well as a learner” has been considered in the development of the modules and arrangement (Moodle, 2007). Because it is free to download, costs were kept to a minimum. The instructors included Moodle in TOEIC courses of all levels, Oral Communication for sophomores and Computer Communication, a course intended to help students develop their research and presentation skills using English, computers, and the Internet. Kobe Kaisei promotes itself as having a low teacher-student ratio, and these classes each had less than 30 students. Access to computers was not an issue as the campus has three computer labs.

Reasons to incorporate blended learning using a CMS

The president of Pennsylvania State University, Graham B. Spanier, described the implementation of blended learning into the traditional classroom as “the single-greatest unrecognized trend in higher education today” (Young, 2002, ¶12). Understandably, many institutions and instructors are choosing to use technology in the language classroom, as it opens the door to many styles of learning. Yet, it is necessary to consider the motives and the methods behind the blending of class materials or any curriculum. According to Levy and Stockwell, “The art of good practice comes out of choosing the right technologies, materials, and resources for the task at hand, both for the teacher and the student” (2006, p. 203). For the authors, a CMS constituted the “right technology” for several reasons. First, the CMS offered a variety of technological tools advantageous to language learning; for example, several Moodle activities include a blog, forum, chat, glossary, quiz, journal, and lesson. For teachers

using webpages to post quizzes or materials and blogs to communicate with students, a CMS like Moodle is a place to consolidate these features. Second, the CMS allowed the teachers to manage grades, student contact information, outside resource links, and media files in one space, resulting in better organization of materials and content. Third, the CMS enabled the teachers to track student participation in the virtual classroom, and this helped the teachers to learn which resources were being utilized and which students needed encouragement and guidance in navigation. Although a CMS is a sophisticated system, certain considerations must be kept in mind when incorporating blended learning. The authors have found several reasons for choosing when and how to incorporate Moodle.

To accommodate students of all levels

First, teachers may have classes with students who vary greatly in academic skills and language ability. This was the case for the Basic TOEIC class in 2006. After 15 students took the TOEIC test, it was apparent that few could be grouped together at a common level, as seen in Figure 1, where the line graph represents the students’ test scores, and the bar graph is the score minus the average. Notice that the difference between the highest and lowest score is nearly 400 points. Also, learning materials that are too easy or difficult (± 100 points on the TOEIC test) can reduce the learning effect by half (Takefuta & Suiko, 2005, p. 185). 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, p. 37).

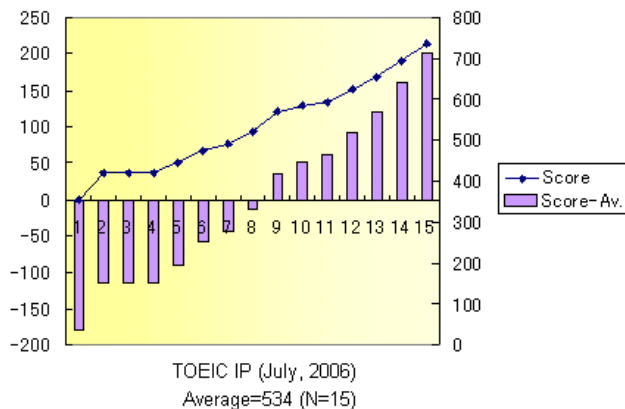


Figure 1. Students' results on the TOEIC test

Using a CMS is a feasible way to cope with such dramatic differences in abilities as the teacher can vary activities for multi-level classes. Saving materials and accessing them for future modification is a benefit of Moodle. For example, teachers can begin by creating a group of foundation tasks according to common learning objectives. These can be basic and compulsory for the entire class. Then additional exercises of review for lower level students may be added. In this way, learners can begin with basic activities done independently, for example, completing a quiz, journal post, or forum post, focusing on a thematic set of vocabulary, a grammar point, or a learning strategy. Teachers can also create a series of incrementally difficult tasks to provide supplementary practice for higher level students. An example

of increasing activity difficulty is shown in Figure 2, where one star represents an easier task and three stars indicates a difficult task. Ultimately, students of all levels can be encouraged to stay focused on the learning objectives while working at their own pace.

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 2. Scaffold of activities

To enhance materials with multi-media and learning objects

Another reason to modify traditional materials from a face-to-face class into blended learning is to enhance materials with multi-media or learning objects so that more learning styles may be exploited. The CMS provides additional context for activities and directions, which is particularly important for lower level learners. These multi-media examples are more difficult, if not impossible, to achieve with paper-based materials, yet can be included in the CMS in several ways.

Visual

Visual learners can benefit from clear color images included in directions or exercises in the Moodle site, such as a vocabulary quiz where students match each image to a term. Although color images are possible with traditional handouts, it may be easier to have students view the same image on the webpage rather than distributing the color image on multiple handouts.

Additionally, the CMS can contain links to other visual learning objects, such as virtual tours. For example, when the Oral Communication class read about the Statue of Liberty and Ellis Island in a text, the teacher included a resource link to a virtual tour of New York, www.nycpov.com/index.php. During the tour, students were given the feeling of actually being in the city as they could click and drag on the picture to explore a 360-degree view, look up or look down.

Audio

Audio files can be very helpful, especially for students who are weak readers. Including a welcoming message or assignment directions in both text and audio form can be one way to personalize the virtual classroom. Embedding audio files into a Moodle assignment, such as a quiz or lesson, enables students to listen to these files time and again at their convenience.

Audio files can also be offered as a resource. For example, the Oral Communication class included reading a novel. Because there is no CD or book on tape for the text, the instructor recorded mp3 audio files for the book. This allowed students to hear the sentence patterns and pronunciation of vocabulary as they read along on the page. Students could also understand the characters' feelings, as emotion was included in the readings.

Hints

Additionally, hints can be included that provide more information when introducing or reviewing grammar and vocabulary points. Using a simple html tag allows teachers to include mouse-over pop-up hints that students can choose to view or not. (The tag is `hints`. The phrases to appear in the pop-up replace the string of aaaaaa, and the letter string or object displayed on the site that will be moused-over replaces the word *hints*). This additional information can help students at a time when they could become discouraged by the difficulty of the activity. Materials on paper cannot offer a similar choice of viewing hints.

Glossary

Moodle also has a glossary that can be linked to other resources and modules in the course. Once the glossary is linked, students can go directly to the definition of a vocabulary word they encounter for review or to learn more.

Learning objects

One general definition for *learning object* is “digital, reusable pieces of content that can be used to accomplish a learning objective. That means that a learning object could be a text document, a movie, a[n] mp3, a picture or maybe even a website” (Learning about Learning Objects, 2004). Digital information used in class lessons, such as webpages and other resources, can be easily organized in and accessed from the Moodle classroom.

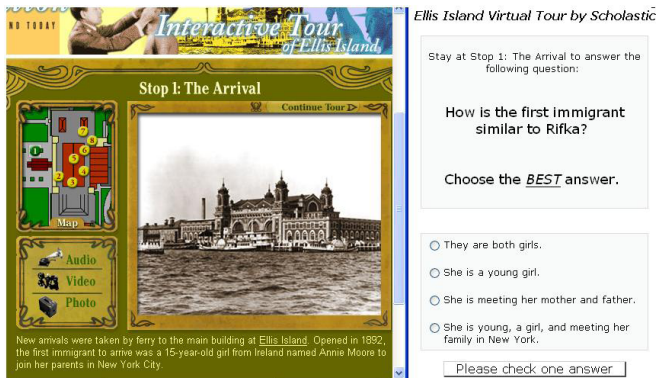


Figure 3. Ellis Island Virtual Tour and Moodle lesson

Figure 3 is an example of using a learning object. In the case of the Oral Communication course, a major setting in the second half of the novel was Ellis Island, New York in the early 20th century. In order to help students develop knowledge and background information, the teacher created a lesson in Moodle based on a Scholastic interactive tour of the historical landmark <www.teacher.scholastic.com/activities/immigration/tour/index.htm>. Not only could students view pictures from the past to better understand the setting, students were also asked to synthesize the content from the story with the new information from the tour.

To learn outside of the classroom

Although schools and instruction go hand in hand, there is a lot of learning to be had outside of the classroom, and this can be facilitated through Moodle. For example, the Oral Communication course focused on global issues throughout the term, including discrimination. Close by, Liberty Osaka Human Rights Museum exhibits information on 12 different minority groups throughout Japan. However, it proved difficult to organize everyone's schedule for a group visit. Therefore, the teacher decided that, rather than miss the information, one face-to-face class would be canceled and students would be requested to attend the museum on their own time within a 3-week period. As a follow-up, the teacher asked students to describe their feelings about the visit, to share a piece of new information they learned during the tour, to choose a discriminated group that they would like to help in the future, and to explain that choice. These responses were collected in Moodle as an online assignment. Using the CMS allowed students to express themselves soon

after their tour, as the learners could access the CMS and provide the reflections and answers without delay. Because students' visits were staggered throughout several weeks, many might have lost the immediacy of the event if it had been necessary to wait and share in the face-to-face class at the end of the 3-week period.

Another topic that the Oral Communication class dealt with was ecotourism and ethical tourism. When the teacher learned that students from the previous year had visited Bali to volunteer with children, she asked those students to share their account with the current class. The students' schedule, however, conflicted with the class time. In order that the current students could still benefit from the information, the instructor asked the two volunteers to create a slideshow presentation on the computer. Then the slideshow was placed into the Moodle classroom, allowing the students to build their understanding of volunteering abroad from fellow college students' personal experiences.

To build personal relationships with the teacher and students

In 2000, Salmon described the development of computer-mediated communication 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). Fostering the relationship between the teacher and other students can help to increase the students' motivation to use the language more often. 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.

Forums

The forum function in Moodle is an obvious place for information exchange and socialization. Teachers can assign a specific question or topic for students to address, as well as, if desired, use a grading system for the posts. One way to increase the students' use of English outside of the classroom is to have them expand on their original post. Roper (2007) found that successful online learners benefited from teachers asking follow-up questions to their answers. Not only is it important to ask questions when replying to the students, but these questions can also help students to increase higher thought processes; "In monitoring [online] discussions or group work activity, faculty must engage in a line of questioning that will continue to drive an idea, thus helping students develop and apply critical thinking skills" (McKnight, 2000, p. 39). Therefore, teachers need to be consistent in asking thought-provoking questions in their responses to students.

Chat and instant messages

Other features of Moodle that allow for extended communication outside of the classroom are the chat and instant message features. Students can ask questions about assignments or begin conversations with others while online. In one instance, during a weeklong break from classes, students in the Oral Communication course were given the opportunity to meet in the chat room during

the regularly scheduled class time. One student took this opportunity to question the teacher about studying abroad and for suggestions about what to study beforehand. This shows a student using the technology for personal goals and information exchange.

Assignments

The assignment function can also be a place to encourage shy or lower level students to contribute to the learning of the class. For example, one of the authors encourages students to ask any kind of question in an assignment called Question Café. After reviewing the questions, the teacher posts those that are pertinent for the entire class to learn from with the answers in the latest news forum in Moodle. This is done anonymously. In this way, teachers can help hesitant students to comfortably contribute to the learning in the classroom.

Coordinating learner activities

Organization is important when considering how to blend traditional information with computer-mediated components as “online learning components often require a large amount of self-discipline on the part of the learners” (Bonk & Graham, 2005, p. 15). Although giving extra exercises can help students maintain interest and motivation, some may have difficulty navigating through a course with many activities and learning objects (Yamauchi, 2007a, p. 138-142; Yamauchi, 2007b).

Therefore, instructors need to streamline activity choices so as not to overwhelm students. Scaffolding exercises in

handouts to mirror those in the CMS helps to make an easy-to-follow layout of Moodle activities. An example of this is provided in Figure 4, with lines indicating the corresponding activity between a paper handout and a screenshot of the Moodle classroom.

Teachers can also provide guidelines for choosing related activities in the CMS. For example, the teacher using the materials in Figure 4 explains that indented activities are optional, while the others are compulsory. As mentioned earlier, the stars indicate the level of difficulty (1 = easy, 3 = difficult). In this way, students can appropriately choose the tasks that are required of and suited to them.

A third consideration for lower level learners is the importance of assigning smaller steps when working on large projects, such as a peer interview, a writing task, or a presentation. For example, teachers can assign an independent online activity, such as posting an image with a brief passage that includes a lesson’s vocabulary or grammar point before assigning a short presentation in front of the class. Another manageable step is the teacher providing a passage with its basic rhetorical/grammar structure explicit online before assigning a reading passage in the textbook.

Fostering autonomy in blended learning

A significant benefit of the CMS is its convenience for independent learning as students are free to access the course at any time and in multiple places. Yet, students will need initial guidance and instruction. Research has shown that there are four steps to achieving learner autonomy: a time of dependence, a time of nervousness and possible conflict, a

The figure illustrates the integration of a physical worksheet with a Moodle course. On the left, a worksheet titled 'Unit () Date ()' contains several sections: 'Step 1' with a table of English-Japanese vocabulary pairs (e.g., wall, office, turn the copier, turn the computer, lock the safe, コンセント, 用品・装置, 消す, つける, set the, receive a, the button, the battery, double the size), 'Step 2' with a reading comprehension question about a size and cost, and 'Grammar' exercises involving the words 'extreme' and 'seriously'. On the right, a Moodle course page for '10/11 - U11 Office Equipment' lists activities: 'Review 01', 'Vocab 1', 'Vocab 2', 'Part 2', 'Part 3', 'Grammar', 'Part 5', 'Part 7', and 'Vocab 3'. Below this, there are sections for 'Adverb or Adjective?' and 'Word Forms'. A second Moodle page for '10/18 - U12 Entertainment' is partially visible at the bottom. Arrows indicate that the worksheet's content is mirrored in the Moodle course activities.

Figure 4: Combined use of a worksheet and Moodle

period of transition, and the realization of autonomy through stronger self-awareness (Kannon & Miller, 2005). There are features throughout Moodle that can aid students in the process of becoming independent learners.

Students in the earlier, dependent phase can benefit from immediate feedback in the quiz and lesson modules. Once a student completes a quiz, they are shown the results as well as which questions were answered incorrectly. Teachers

can include specific explanations about the error in the feedback. This helps students realize their mistakes quickly, which can aid in their comprehension of the correct answer. Such immediacy of learning is more difficult with paper-based materials, which need to be collected, graded, and redistributed. If allowed by the teacher, students can attempt the quiz multiple times for higher scores, and this can be a step towards developing responsibility for learning and autonomy.

Students who are reaching independence may track the assignments they have or have not completed. Figure 5 is an example of one student's learning history. This clearly shows the student which exercises need to be completed (A). For example, the assignment titled Management-2 has no score under the heading *Best grade*, so it has yet to be done. Yet this student can also track her progression in the multiple attempts of a completed lesson or quiz, such as the Parts of Speech quiz, as seen in (B). The student sees the number of endeavors that have been made of the quiz and the results of each effort. The average of the attempts, which is 13/15 in this case, is shown below the summary of attempts in (B) as well as under the heading *Best grade* in (A).

Study skills necessary for successful blended learning

Although a benefit of blended learning is the freedom to choose a time and a place for working online, “procrastination could cause a student to fall behind in the online course” (Roper, 2007, ¶8). Therefore, teachers need to address the issue of managing time with students, especially with less autonomous learners. Roper (2007) surveyed 59 successful students of online courses. From their answers, he found that these students used several strategies for managing time. First, they typically created a routine schedule for studying online. For example, they chose a certain day and time to dedicate to the class. They also logged in often, either daily or every 2-3 days. Additionally, they planned certain amounts of time for class exercises.

A.

Topic	Name	Best grade
10	Vocab Education1	9.9 / 10
	Grammar: to DO/DOing 1 ★★☆☆	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 ★★☆☆	

B.

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

These strategies benefited the students, yet what can teachers do to foster the use of time-management strategies by less independent learners? One possibility is to explicitly ask students to develop time-management skills, such as committing to a specific date and time for studying. Teachers can also ask learners to login to the CMS frequently, and, if necessary, send out periodic reminders about the importance of visiting the class. In addition, it's helpful for instructors to assign weekly tasks. Choosing to have one or two activities staggered throughout the week provides more reasons for logging in often. If handouts for the face-to-face class are made accessible only in the online classroom, this gives students more incentive to login so that they can complete the worksheet before meeting in class. In order for students to plan the proper amount of time for an exercise, it is helpful if the teacher includes clear and explicit time expectations in the assignment's directions and requirements.

Another concern about blended learning is organizing electronic information. To help with this, students can use Moodle's blog feature in several ways. For example, they can type in notes for research assignments. These notes can be rearranged and expanded on easily in the blog. It can also be used for copying and pasting links from other websites for future browsing. If a student is doing research they can copy and paste webpage links into Moodle rather than adding the link as a favorite to a specific computer. This way, the link is mobile and can be viewed from any computer with Internet access. The blog can also be used as a place to draft and redraft written assignments. In the forum module, the standard amount of time in Moodle given for editing after a post is 30 minutes (although this can be modified

by administrators, if desired). Thirty minutes may not be enough time for all students, so teachers can encourage them to draft and redraft in the blog prior to posting the assignment in the forum.

Conclusion

There is a lot to be gained from incorporating a CMS into a face-to-face class, especially when the technology provides materials or media that cannot be readily made available in handouts, overheads, or other traditional materials. Teachers can include learning objects, audio files, and visual images to expand the students' learning experiences. Materials can be varied for classes with a large range of skills and abilities. Moodle includes a number of features and functions that allow learners to interact in different ways than in the campus-based classroom, which can promote more use of the language and encourage timid students. However, students need to be taught how to manage time and organize electronic information in order to be successful blended learners.

Lori Rink has worked at Kobe Kaisei Women's College for over 5 years as a full-time lecturer. There, she has focused on using technology and on examining global issues in the EFL classroom. <lmrink@hotmail.com>

Mari Yamauchi is a lecturer in the department of English as an International Language and Media at Kobe Kaisei College. Her research interests include cross-linguistic studies of tense and aspect, written text analysis and teaching EFL to Japanese students. <yamauchi@kaisei.ac.jp>

This article is an adaptation of an article that first appeared in *Kobe Kaisei Review*, 46 (2008) titled Integrating Blended Learning into the Language Classroom. Part of this research is supported by KAKENHI (Grant-in-Aid for Scientific Research) from JSPS ((C) #195205330001, Leader: Mari Yamauchi).

References

- Bonk, C. J. & Graham, C. R. (2005). *The handbook of blended learning*. CA: Pfeiffer.
- Kannon, J., & Miller, J. (2005) Affect and learner autonomy in an online environment. Paper presented at the 20th Annual Conference on Distance Teaching and Learning. Madison, Wisconsin. Retrieved May 29, 2007, from <www.uwex.edu/disted/conference/Resource_library/proceedings/04_1139.pdf>.
- Learning about learning objects*. (2004). Welcome to learning about learning objects! Retrieved December 6, 2007, from <www.learning-objects.net/>.
- Levy, M., & Stockwell, G. (2006). *Call dimensions: Options and issues in computer-assisted language learning*. Lawrence Erlbaum Associates.
- McKnight, C. (2000). Teaching critical thinking through online discussions. *Educause Quarterly*, 4. 38-41. Retrieved December 2, 2007, from: <www.educause.edu/ir/library/pdf/EQM0048.pdf>.
- Moodle (2007). *Philosophy*. Retrieved October 15, 2007, from: <www.docs.moodle.org/en/Philosophy#Conclusion>.
- Roper, A. (2007). How students develop online learning skills. *Educause Quarterly*, 30 (1). Retrieved May 16, 2007, from <www.educause.edu/apps/eq/eqm07/eqm07110.asp>.
- Salmon, G. (2000). *E-moderating: The key to teaching and learning online*. London: Kogan Page.
- Takefuta, Y., & Suiko, M. (Eds). (2005). *Kore kara no daigaku eigo kyoiku. [The future of English education]*. Iwanami.
- Thorne, K. (2003). *Blended learning: How to integrate online & traditional learning*. Philadelphia: Kogan Page.
- Yamauchi, M. (2007a). Kurasunai gakuryoku kakusa taisaku toshiteno Moodle katsuyo no kokoromi. [Introducing Moodle to manage classes of varying abilities]. *Kaisei Review*, 45, 125-145
- Yamauchi, M. (2007b, September 1). *Kurasunai gakuryoku kakusa taisaku toshiteno blended learning: kokatekina "blend" wo mezashite. [A blended-learning solution to cope with multilevel classes: How to effectively blend.]* Paper presented at The National Meeting of the Japan Association for Developmental Education.
- Young, J. (2002). "Hybrid" teaching seeks to end the divide between traditional and online instruction. *The Chronicle of Higher Education Information Technology*. Retrieved October 29, 2006, from <www.chronicle.com/free/v48/i28/28a03301.htm>.