

Student Attitudes Towards Using Moodle as a Course Management System

學生對使用的 Moodle 作為課程管理系統的態度

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Computers have become more prevalent in helping teachers in their day-to day work. Computer-assisted language learning (CALL) is also becoming more prevalent in teaching and learning as a means of enhancing classroom instruction. Moodle is an open source course management system (CMS), also known as a learning management system (LMS) or a virtual learning environment (VLE). Many people use Moodle in blended learning environments to enhance classroom teaching and learning. In this study, student attitudes towards using Moodle as a CMS are explored. Data show that students are not overly satisfied with using Moodle, but they do agree that it offers great functionality for learning outside the classroom. The data from this study may hold important implications for EFL educators or those who use a CMS to offer great benefit and satisfaction to their students.

Keywords: CALL, Moodle, CMS, student attitudes

Computers have been used in language learning for about the last 50 years (Butler-Pascoe & Wilburg, 2003; Fotos & Browne, 2004; Warschauer & Meskill, 2000). Computer-assisted instruction (CAI) came into existence around the same time and was used in language instruction throughout the next two decades (Butler-Pascoe & Wilburg, 2003; Lacina, 2004; Stevens, 1989). Today, computers help teachers in their day-to day work in almost every way.

According to Robert Taylor (1980), computers serve three roles in education: tutor, tool, and tutee. As tutor, the computer can be used in ways similar to traditional teaching or instruction. It gives students a place to work on exercises and problem-solving activities. As a tool, it is used as word processor, database manager, spreadsheet, a graphics design system, or as a link to an information resource. As tutee, the computer is programmed to perform specific tasks. More recently, Kern (2006) has identified the role of technology in CALL as a tutor, tool, and medium. As a tutor, computers can provide instruction, feedback, and testing. As a tool, they provide access to learning materials. Finally, as a medium, computers provide the Internet, a place for communication, publication, and learning.

The history of using computers in education shows some benefits to both instructors and learners. Computer-mediated communication (CMC) provides learners with “comprehensible input, [encourages] learners to produce comprehensible output, and [fosters] negotiation of meaning” (Erben, Ban, & Castañeda, 2008, p. 85). CALL has also advanced by enabling English language learners (ELLs) “to construct meaning in a digital environment” (Lacina, 2004, p. 113). With computers, teachers can provide a learning environment where learning is authentic and activities are interesting to students (Healy & Klinghammer, 2002; Lacina, 2004). Moreover,

“CALL is now an integral part of L2 classrooms and is likely to assume increasing importance as technology improves” (Fotos & Browne, 2004). Today, computer technology that “can assist in implementing curricula and activities that addresses all these goals” (Provenzo et al., 2005, p. 131) is widely used and available.

Literature Review

CALL (Computer-Assisted Language Learning)

Over the last few years, CALL has become an increasingly dominant theme in language education. This is likely because, as Chapelle (2008) notes, “technology underlies forms of communication responsible for increasing language contact and globalization, which in turn affect language education” (p. 585). She also notes that “technologies themselves as well as how they are constructed and configured to create opportunities for language learning are central issues which evolve rapidly with changes in technology (p. 586).

A number of studies have examined teachers and students’ participation in a computer-mediated discourse and compared it with their participation in traditional face-to-face classroom discourse (Davis & Thiede, 2000; Kern, 1995; Son, 2002; Sullivan & Pratt, 1996). The studies showed more students than teachers participated in the computer-mediated discourse. In addition, in an online communication environment, learners produced more lexically and syntactically complex sentences and engaged in a wider variety of participant roles (Kern, 1995; Pellettieri, 2000).

In Taiwan, some studies have focused on CALL (Chiang, 2007; Jou, 2006; Tai, 2005), but not many have been done on university students’ attitudes towards using a course management system and how it might improve students’ language learning.

Moodle

Moodle is an open-source Course Management System created by Martin Dougiamas in 1999 (“History,” 2014). Unlike other CMSs, WebCT and Blackboard being the most well-known, Moodle is free. It only requires a server running PHP and a database. It does require some technical know-how to set up, but there are many tutorials online and free help in the Moodle forums. At the time of this writing, Moodle was being used on approximately 70,000 websites in 235 countries (“Moodle Statistics,” 2014) among a variety of universities, high schools, military organizations, airlines, and independent educators (“Usage,” 2013).

According to Stanford (2008), there are ten reasons to choose Moodle over other CMSs: it is easy to use, you can access resources via the web, it spawns interaction between the learners and tutors and collaboration between learners, allows learners to access independent learner pathways, allows teachers to track learner progress, and gives learners feedback on tasks. In addition, it boasts several features such as being hosted in a secure environment, automatic backup of courses, and a detailed gradebook.

Several studies have looked at using Moodle as a CMS. Some have given simple but extensive introductions to Moodle (Melton, 2008; Dinero, 2011). Some have found great success

in moving from other CMSs to Moodle, with both teachers and learners showing satisfaction for Moodle (Beatty & Ulasewicz, 2006; Lawler, 2011; Kavaliauskienė, 2011). Others have looked at design principles for Moodle courses (Elias, 2010), while others have found that using Moodle as a CMS can enhance learner autonomy (Sanprasert, 2010).

Kavaliauskienė (2011) found that the majority of students in a psychology class were content with the activities offered in Moodle and held positive attitudes towards using it as a CMS. Additionally, Carvalho, Areal, and Silva (2011) found that the majority of students and faculty at a Portuguese university preferred Blackboard over Moodle, but this is likely due to the fact that Blackboard was the official LMS of the institution and everyone had accounts on it by default. Moodle was used only by some instructors and students. The researchers also found out, however, that students undertook a higher-level of engagement with Moodle, using it for online testing and submitting assignments, whereas they tended to use Blackboard only as an electronic file repository. Moreover, when students had used both Moodle and Blackboard, the majority preferred Moodle for its organization of materials, ease of access to course materials, participation in forums, and its better visual appearance.

In Taiwan, advantages and disadvantages of Moodle for college writing courses have been examined (Wu, 2008). The author found that Moodle held many advantages over the university's in-house CMS, including recordable text-based and computer-mediated communication, group messaging and chat, asynchronous communication, the ability to use long-distance exchanges, and the use of hypermedia links. The major challenge faced when using Moodle in a writing course was the treatment of error. While Moodle does allow for uploading of assignments and teacher feedback on those assignments, Wu noted that teachers may benefit from an "editable comment bank" module which would provide a drop-down menu of canned comments (p. 55). This is a feature that could likely be added through a plugin.

Another study done in Taiwan by Lin (2013) found that Moodle use, flexible learning, and demographic characteristics were significant explanatory variables of ESL student learning outcomes and that students preferred Moodle for their computer-mediated language learning. This study shed light on student motivation and CMS usage for Taiwanese institutions and researchers who would focus on ESL student learning.

The purpose of this study was to assess Taiwanese students' attitudes towards using Moodle as a CMS and to ascertain what benefits and drawbacks the students perceive in using it. In order to provide a comprehensive understanding of students' attitudes towards Moodle, a self-report survey was administered. The survey sought to answer the research question, "What are students' attitudes towards using Moodle as a Course Management System?"

Methodology

The population for this study were 86 students studying English in a Department of Applied Foreign Languages undergraduate degree program at a private university in central Taiwan. There were 48 females (60.8%) and 31 males (39.2%) between the ages of 19 and 25 ($M = 20.92$). All students were enrolled in either a sophomore or junior level writing course or a junior

level presentation course. Most students had been studying English for 5-8 years ($N = 26$, 32.9%) or 9-12 years ($N = 28$, 35.4%). Of 86 students, there were 79 responses, for a 91.2% return rate.

The instrument was a self-report survey designed by the researcher and his assistant and administered via Google Drive. The survey was originally designed in Chinese and was translated into English before adding more questions, which were then translated into Chinese. The translation was done by the researcher's assistant, who has experience in English-Chinese translation. The questionnaire was put online and made freely accessible to all students via the use of a web browser, so participants had the option of taking the survey at their leisure without time constraints or using up class time.

The survey consisted of three parts. In the first part, there were six questions gathering demographic information such as nationality, age, and year in school. In part two, there were ten Likert-type scale questions. Five of the questions judged students' attitudes towards using Moodle, and five questions judged students' attitudes towards Moodle's usability and functionality. All questions were rated on a five-point scale with one meaning 'strongly disagree' and five meaning 'strongly agree'. The first five questions judging students' satisfaction with Moodle had an acceptable level of reliability ($\alpha = .847$), as did the five questions judging the functionality of Moodle ($\alpha = .866$), so the two questions can be said to be reliable in measuring those two constructs, respectively. The third part consisted of eight questions concerning students' habits when using Moodle and the internet. These took the form of checkboxes to which the students could select an answer. This research utilized a blended quantitative-qualitative design. The survey data from the first three parts was collected and analyzed with SPSS 22 to obtain reliability coefficients and overall frequencies.

Results

The first five statements judged students' satisfaction with Moodle. These statements were a) I like to learn on the interactive e-learning platform, b) The e-learning platform can improve my learning efficiency, c) I am confident with the uses of the e-learning platform, d) I will actively learn the functions of the e-learning platform, and e) I am confident with my e-learning progress. Overall, respondents tended to agree with the statements or remain neutral. Full results for the first five statements can be seen in Table 1.

The next five questions judged students' satisfaction with the functionality of Moodle. These statements were a) It is easy for me to understand the uses of the e-learning platform, b) The e-learning platform is flexible and easy to interact with, c) I am satisfied with the overall learning environment on the e-learning platform, d) I am satisfied with the course arrangement on the e-learning platform, and e) I think the courses on the e-learning platform meet my needs. In contrast to the five questions judging students' satisfaction with Moodle, the responses to these five questions were mostly positive, although there were still many students who answered neutrally. The full responses for questions 6 through 10 can be seen in Table 2.

The third part examined students' habits and usage of Moodle. Results show that most students use the Chinese language for their Moodle interface ($N = 52$, 65.8%) although there are

some that use English (N = 25, 31.6%) or Japanese (N = 2, 2.5%). Most students responded that they logged into Moodle from either their family home (N = 44, 55.7%) or their dormitory room (N = 30, 38.0%) using a desktop PC (N = 44, 55.7%), although some used laptop computers (N = 27, 34.2%) or even smartphones or tablets (N = 8, 10.1%).

The data gathered also reveal that most students logon to Moodle once a week (N = 32, 40.5%) or 2-5 times a week (N = 28, 35.4%), although some (N = 11, 13.9%) logon less than once a week. In addition, most students use the Internet for 3-4 hours a day (N = 42, 53.2%), although some use it for only 1-2 hours a day (N = 13, 16.5%) or for 5-6 hours per day (N = 14, 17.7%). Of that time, most students use Moodle for 1-2 hours per week (N = 53, 67.1%), although others use it for 3-4 hours per week (N = 22, 27.8%) or 5-6 hours per week (N = 4, 5.1%). Finally, the respondents checked boxes to indicate why they usually logged onto Moodle. Respondents were allowed to choose all the situations that were appropriate or to add their own. Responses indicate that most students logged onto Moodle in order to download or upload files or home (N = 53, 43.1%) or to look for information about a class (N = 46, 37.4%), although some used Moodle to take part in online discussions (N = 13, 10.6%), and a few students used it to preview course readings (N = 5, 4.1%) or to review assignments (N = 6, 4.9%).

Discussion

The results of this self-report survey showed that most students were either neutral or satisfied with Moodle. Without qualitative data, it is impossible to tell what could be improved in the online courses or with the online platform itself in order to increase student satisfaction. It could very well be that most students are used to more traditional learning methods and have difficult understanding CALL or why they need to use it. Oddly, even though students were not overly satisfied with Moodle, they were mostly satisfied with the functionality offered by Moodle. This data shows that even though students may not like using Moodle, they do recognize that it has certain benefits for them, such as being able to look for information regarding a course, preview course readings, or to download and upload assignments without having to find the teacher and hand it in.

It is interesting that most students use a Chinese interface for Moodle when an English or Japanese one is available. With qualitative data, one might discover student attitudes towards using one interface or another. Since the students surveyed in this research study both English and Japanese, might they not gain some educational benefit from using an English or Japanese interface?

Table 1. Students' Satisfaction with Moodle

Question	Response	<i>N</i>	Percent
Question 1			
	Strongly disagree	1	1.3%
	Disagree	3	3.8%
	Neutral	36	45.6%
	Agree	30	38.0%
	Strongly Agree	9	11.4%
Question 2			
	Strongly disagree	0	0.0%
	Disagree	5	6.3%
	Neutral	30	38.0%
	Agree	33	41.8%
	Strongly Agree	11	13.9%
Question 3			
	Strongly disagree	1	1.3%
	Disagree	4	5.1%
	Neutral	38	48.1%
	Agree	29	36.7%
	Strongly Agree	7	8.9%
Question 4			
	Strongly disagree	1	1.3%
	Disagree	15	19.0%
	Neutral	36	45.6%
	Agree	21	26.6%
	Strongly Agree	6	7.6%
Question 5			
	Strongly disagree	0	0.0%
	Disagree	9	11.4%
	Neutral	35	44.3%
	Agree	28	35.4%
	Strongly Agree	7	8.9%

The fact that most logon from their home or their dormitory room using a desktop pc or laptop is not surprising. What is surprising is that some students logon from their smartphone or tablet. At the time of this writing, an older version of Moodle was being used (1.9), which did not have different stylesheets for various devices. If one were to upgrade to the newest version of Moodle (2.7 at the time of this writing) that supports different stylesheets and looks nice and is more functional on smartphones and tablets, one might see an increase in students using their smartphones for educational CALL.

Table 2. Students' Satisfaction with Moodle's Functionality

Question	Response	<i>N</i>	Percent
Question 6	Strongly disagree	1	1.3%
	Disagree	6	7.6%
	Neutral	20	25.3%
	Agree	33	41.8%
	Strongly Agree	19	24.1%
Question 7	Strongly disagree	1	1.3%
	Disagree	8	10.1%
	Neutral	20	25.3%
	Agree	37	46.8%
	Strongly Agree	13	16.5%
Question 8	Strongly disagree	0	0.0%
	Disagree	5	6.3%
	Neutral	25	31.6%
	Agree	31	39.2%
	Strongly Agree	18	22.8%
Question 9	Strongly disagree	1	1.3%
	Disagree	8	10.1%
	Neutral	21	26.6%
	Agree	30	38.0%
	Strongly Agree	19	24.1%
Question 10	Strongly disagree	1	1.3%
	Disagree	8	10.1%
	Neutral	27	34.2%
	Agree	30	38.0%
	Strongly Agree	13	16.5%

Most students indicated that they logged onto Moodle once a week or 2-5 times a week, which is not surprising as they have a class only once per week and just need to check for updates. Additionally, most only spend 1-2 hours per week on Moodle, which seems sufficient for their purpose of downloading or uploading assignments, looking for information, and previewing course readings. If their classes were to offer more online functionality (language learning games, quizzes, online discussions outside of class), one might see increased usage

throughout the week. One aspect not looked at in this study is *when* they were logging on. Was it just after class or just before? Was it in the middle of the night? Data such as that might reveal student study habits that could be beneficial to educators with CALL courses.

Conclusion

The data in this survey reveal important information about student satisfaction about Moodle and their perceptions of its functionality. In addition, this survey discovered important information about student habits when using Moodle. This data should be useful to educators who have CALL courses or who use a CMS in addition to a classroom course.

This study was not without its limitations. First, there was no qualitative data taken in this survey, so further examination of student attitudes is impossible, and one cannot begin to understand the student answers or habits in any great detail. Additionally, the population used for this study was a convenience sample, so the results are not generalizable. Moreover, this study used a self-report survey, so the results may be inaccurate in that respondents may have answered according to how they think the researcher would want them to answer, not according to how they honestly feel. Finally, the two factors examined, satisfaction with Moodle and Moodle's functionality only had acceptable levels of reliability. The questions examining these factors may need to be changed slightly and tested with another population in order to achieve higher reliability.

However, this study does hold several implications. Educators in charge of CALL courses or those who are using a CMS such as Moodle may find the results beneficial in arranging their online courses to suit students' needs. Additionally, the researcher of this study may alter his future courses in order to offer more benefits and satisfaction to his students. This study might also be significant to ESL/EFL educators who want to understand the factors that contribute to effective English instruction. The results might provide useful information about Taiwanese students' experiences of using a CMS or LMS for language learning. Moreover, this study might give some ideas of how to use Moodle to monitor students learning.

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