

***Enhancing Teaching through Moodle:
A Case Study on E-Learning-Supported English Language Teaching***

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Abstract

This paper describes the experience of ELC-NCT regarding the implementation of blended learning in teaching English. As there is no hard-and-fast rule on how to carry out blended learning in various courses taught in ELC so far, this study aims to follow the practice of select teachers to identify best practices, challenges, and opportunities, which can then be used as guide to develop a blended learning environment. A group of ELC teachers served as the focus group: a few who are relatively new, several that have been teaching in the Center from 3 to 6 years, and others that have been teaching in the Center for more than 6 years. The study monitored and recorded the practices they follow in using Moodle to deliver their courses, the challenges they faced, the changes they made in teaching methods, and their perceptions on issues relevant to integrating online activities in teaching. The study used qualitative and quantitative methods in analyzing the data collected for the study. Data collection first involved taking a survey of all ELC teachers to determine baseline data. This survey comprises assessment rubric and teacher perceptions on functionality, usability, and identification as technical support of Moodle LMS. An online discussion forum then followed for the focus group. This was done to provide depth and to further reinforce survey results. From this study, a list of best practices was developed and recommended for use as guide by ELC staff to improve the implementation of blended learning in their classes.

Keywords: Blended Learning, E-Learning, Moodle, Web-Enabled ELT

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Introduction and background of the study

It is a very well-known fact that we now live in a landscape where text messages, photos, audio, and video are transmitted from one mobile device to another in a matter of seconds. These devices allow us to connect to the Internet through wireless and other types of networks. It can be further said that emails, instant messaging, blogs/vlogs, wikis, and social media have revolutionized the way we share information (Tanveer, 2011). Moreover, the exponential growth in popularity of Online Learning Environments (OLEs) starts to drive change in many aspects of teaching and learning, such as course design, delivery methods, teacher-student interaction, design of student tasks, and student assessment (Bennett & Lockyer, 2004). Realizing that infrastructure and devices already exist and are just waiting to be fully utilized, administrators of the English Language Center (ELC) in Nizwa College of Technology (NCT) decided to implement a policy to integrate an open-source Learning Management System (LMS) in the delivery of English Language courses. As it is reckoned that full-fledged e-learning courses will not suit the level of students in the current teaching-learning environment at the center, the ELC management also advised to implement a combination of face-to-face sessions and e-learning practices in the so-called “blended learning” approach. Simply put, blended learning means “the thoughtful integration of classroom face-to-face learning experiences with online learning experiences” (Garrison & Kanuka, 2004). From this background, this study was carried out.

The locale of this study, Nizwa College of Technology (NCT), is one of the seven colleges of technology (COTs) that operate under the Ministry of Manpower. It provides academic programs that support the production of globally competitive Omani professionals in different areas such as Information Technology, Business Studies, and Engineering. As part of program requirements, students take English Language courses from ELC. NCT is currently offering two English Program tracks: the Foundation Program and the Post-Foundation Program. The Foundation Program focuses on four macro skills (reading, writing, listening, and speaking) intended to enhance students’ communication skills in preparation for the requirements in the different fields of specialization the students would pursue in Business Studies, Engineering and Information Technology. Upon registration in the college, students are grouped based on their English Language proficiency through a placement test which in turn determines their foundation English Language level (Levels 1-4). On the other hand, the Post-Foundation Program focuses on field-specific English Language discourses, such as technical writing and public speaking. To complement the existing programs, NCT provides support for English Language education through facilities and services like the Self Access Center, offering of multimedia classes, and extracurricular activities such as English Day, Public Speaking Competition and Language and Culture Week (Nizwa College of Technology [NCT], 2019).

In terms of the learning management system, although there are many commercially available LMSs, ELC chose to implement their e-learning-supported English Language Teaching (ELT) environment using *Moodle*, as it is free and open-source. More importantly, it is the e-learning platform of choice in the college. As it is open-source and free, there is no associated license fees. The content and design tools provided by the LMS are driven by the needs of *Moodle* user community (Moodle, 2019) including NCT.

Related Literature

E-learning is not a new teaching paradigm. In fact, this approach is here for decades and is also a popular teaching strategy for educational institutions of different levels. E-learning refers to the use of technology in the context of the teaching-learning process (Wilson, 2012). In addition, e-learning refers to “hybrid or blended courses where face-to-face time is reduced and replaced by online activities” in which case, the blended learning approach to teaching and learning is followed (Nichols, 2008, in Wilson, 2012). M. B. Nejad, E. B. Nejad and SadeghiJoola (2012) studied the different classifications and standards of e-learning, and they reported that e-learning is characterized as the use of technology for learning and would include applications using the computer and the Internet. Moreover, learning materials can be coursed through different modes such as the internet, intra/extranet, audio tape, video tape, satellite, TV and CD-ROM (p. 9785). The U.S. Department of Education, Office of Planning, Evaluation and Policy Development (2010) defined online learning as “learning that takes place partially or entirely over the Internet” (p. 9). With these definitions, e-learning could refer to the extent on how technology is used in the teaching-learning process.

The U.S. Department of Education, Office of Planning, Evaluation and Policy Development (2010) classified e-learning into three aspects, namely the learning goal or objective, experience, and online learning activities. The first aspect is the learning goal wherein the class is conducted in a virtual class termed as replacement to the actual classroom teaching-learning, while the second one is enhancement as to augment the activities done in the actual class. The second aspect is the experience in learning divided into three types. The expository instruction is when information is provided through different materials or media (i.e. lecture or handouts); active learning is when the students use different activities for their learning such as online drills, simulations, games, or microworlds, and interactive learning is where learners cooperate with other learners and teachers through different technological means. The third aspect is the type of e-learning activities conducted as synchronous, where learning takes place in the actual classroom or a virtual class, and asynchronous, where learners access the learning niche in different times providing inputs and outputs.

M. B. Nejad, E. B. Nejad and SadeghiJoola (2012) classified e-learning into different models, namely: (a) Synchronous Model refers to online learning wherein the members of a class participate in virtual classrooms and conferencing simultaneously, (b) Asynchronous Model refers to offline learning wherein members of the class access the materials from the Internet and do the tasks at their own pace, (c) Computer-based Training Model refers to e-learning wherein the materials used are stored in a software stored in CD, (d) Internet-based Training Model refers to e-learning wherein the course contents are delivered through the internet and its network, and (e) Web-based Training Model refers to e-learning wherein the course contents are delivered through the Local Area Network (LAN) and the Internet. This classification of e-learning is based on the group dynamics of teachers and students and the technology used in conducting the classes.

In terms of the use of e-learning and blended learning in ELT, Kim (2008) studied the perception of ESL/EFL teachers regarding the use of computers in the classroom.

Findings showed that computers are used as a tool for learning (p.248). However, it should be noted that the findings focused on the use of computers wherein it is teacher-centered, by having the computers as supplemental tool in language learning. In another study, Ilter (2009) studied technology use and its motivation of students in the classroom. The study used a questionnaire to collect data from students in the Akdeniz University Preparatory Classes for academic year 2007-2008. The results show that technology motivates students to learn language when technology is present in the language learning process (Ilter, 2009, p.115).

Tanveer (2011) conducted a study regarding the different perceptions, challenges, and strategies of students and teachers in the use of e-learning tools in language learning. The study found out that students most likely prefer to have technology in the teaching learning process (p.3). Meanwhile, the challenges faced by students and teachers are their current technological knowledge and skills to use the digital devices and the resources of the educational institution as to integrate e-learning in the curriculum. In another study, U.S. Department of Education, Office of Planning, Evaluation and Policy Development (2010) conducted a meta-analysis of different studies regarding online learning, the combined or blended learning and face-to-face instruction. Results showed that students in online learning environment perform better than those who had face-to-face or traditional learning.

Meanwhile, Kocuglu, Z., Ozek, Y., and Kesli, Y. (2011) did a study on the effects of blended learning for a teacher training program on English Language teachers. Although the results showed that there is not much difference between the blended learning approach and the traditional form of teaching it terms of gaining knowledge, it also showed that learners tend to be more interested in studying if technology is used in the teaching-learning process. This conclusion is further supported by the study of Kaya, H. (2015), where it was found that integrating technology in language teaching helps students become more active learners and encourage them to reflect more on their own learning.

Methodology

The subject of this study is the group of ELC teachers that use *Moodle* in delivering their lessons, most especially the “focus group” consisting of teachers that are identified as the most active Moodle users in the Center. One group of teachers in the focus group are considered new teachers, that is, they teach at the Center for three years or less. Meanwhile, another group, called the middle group, is comprised of teachers who have been teaching in the Center from three to six years. The last group called the senior group are the teachers who are teaching at the Center for more than six years already.

In order to get baseline information about the perceptions of users regarding the use of Moodle LMS as the e-learning/blended learning platform to teach English, a Center-wide data collection was conducted through an online survey in the 4th week of the semester, or about a third of the way in the semester. This was participated by English teachers who use e-learning (Moodle) in their classes. This served as the baseline data of the study, which is used as foundational information regarding analyzing specific feedback from the focus group. The Center-wide survey formed the quantitative part of data and was participated by all ELC teachers who use Moodle in their classes,

without regard whether the utilization is light or heavy. The survey questionnaire is divided into two parts. The first part asks about the perceptions of respondents regarding the fitness of various features of *Moodle* LMS in their class (Moodle Assessment Rubric), while the second part deals with the respondents' perceptions on the functionality, usability, and technical support of *Moodle* LMS in successfully conducting an e-learning-supported English Language class. Moreover, regarding the survey, scale items were developed for the following major dimensions: LMS functionality, system usability, and technical support. Scale items were in 5-point Likert Scale ranging from Not Important to Extremely Important. The *Moodle* assessment rubric, meanwhile, contained choices as Do Not Meet Class Requirements, Meet Class Requirements, and Exceeded Class Requirements Needs.

Furthermore, an online semi-structured interview through Moodle's online discussion forum was created for the focus group. This online discussion forum was used in the study to determine the issues faced by participants that belong in the focus group regarding the use of *Moodle* LMS during the study, as well as the enhancements they had to do with the Moodle LMS to fully support their requirements in class, and the changes in the teaching practices they would recommend for the proposed approach to be successfully implemented. This discussion forum was moderated by the Technical Support Team of the study, comprised of two academic staff from the IT Department. The online discussion was made available to the members of the focus group at the beginning of the semester; however, the bulk of communication happened towards the middle of the semester when members of the focus group started to have ample, relevant experiences regarding the implementation of blended learning in their respective classes for that semester and wanting to do more. Their communication with the Technical Support Team of the study served as another source of valuable information for the data collection process. The online semi-structured interview that was facilitated through Moodle online discussion forum served as another main source of data for this study. The discussion focused on several major dimensions as follows: general issues faced in LMS, course design and delivery requirements that need to be addressed by *Moodle*, and changes in teaching practice due to adoption of blended learning approach. Regular interaction happened within the online discussion forum between the members of the focus group (English teachers) and members of the Technical Support Team (IT Department staff). Threads of these communication were recorded and used to support and/or reinforce the baseline information taken from the online survey.

Once data is collected from the survey and the discussion forum/interview, it was analyzed, interpreted, and generalizations were made. From these generalizations, several best practices were identified, compiled, and recommended as a guide for all teachers in the Center to follow, to make the implementation of blended learning more successful.

Results

The survey distributed to the participants focused on two areas: LMS Features Assessment (Moodle Assessment Rubric), and LMS Functionality, Usability and as Technical Support Tool. The following sections provide an analysis of the results based on the perceptions of the participants who participated in the survey.

In terms of the perceptions of the respondents about the different *Moodle* LMS features that they used in class, all parameters received “Meet Class Requirements” as the main choice. Percentages of respondents that selected this choice ranged from 65.6% to 89.1%, with the highest item being “Sufficient video or file storage” (89.1%) and the lowest item being “Track student attendance” (65.6%). The corresponding respondents’ percentages for the choice “Meet Class Requirements” on the different parameters under this category are as follows: (1) Sufficient video or file storage, 89.1%; (2) Allow flexibility in developing test or quizzes, 76.6%; (3) Support for electronic communication and collaboration, 79.7%; (4) Track student attendance, 65.6%; (5) Allow posting of assignments, 79.7%; (6) Contents are protected with security protocols, 84.4%; (7) Can generate grade reports, 75%; (8) Allow flexibility in providing marks, 81.3%; (9) Monitor course progress of students, 81.3%; (10) Provide feedback on assignments, 78.1%; and (11) Layout is simple to navigate, 73.4%. Since all items have around 2/3 or more of the respondents choosing Meet Class Requirements, it is concluded that as per the perceptions of survey participants, all *Moodle* features identified can support the needs of their class. However, it has to be pointed out as well, that among these features, survey participants thought that digital storage, content protection, and the LMS’s ability to provide more flexibility (or alternative activities) to provide marks to students, are the main features that really meet their requirements, as shown by very high percentages of participants that chose them: 89.1%, 84.4% and 81.3% of participants, respectively.

Also, from the respondents’ perceptions in this section of the survey, it has to be further emphasized that some of the parameters, such as posting of assignments, generation of grade reports, tracking student attendance, feedback provision, and having security protocols, generated quite high percentages for the “Exceeded Class Requirements Needs” choice, with 20.3%, 18.8%, 15.6%, 14.1% and 14.1%, respectively. These further showed that the features of the LMS used – *Moodle* – even surpassed teachers’ expectations in some areas.

In regard to *Moodle* LMS Survey – LMS Functionality, Usability and as Technical Support Tool, the table below shows the responses from the survey-participants:

No.	LMS Functionality	Remarks
1	Allow creation/posting of assignments, tests, projects, etc. online	Very Important
2	Provide criteria and procedures to automatically grade assignments	Very Important
3	Include means to write objectives and learning outcomes	Very Important
4	Maintain records of communication with other users	Very Important
5	Post/monitor course progress and effectiveness	Very Important
6	Track registration records	Very Important
7	Provide feedback on assignments	Very Important
8	Allow chats and asynchronous communications: postings, forums	Very Important
9	Track and facilitate individual participation	Very Important
10	Support for electronic communications e.g. email, posts, etc.	Very Important
11	Support use of external resources e.g. web links, etc.	Very Important
12	Can incorporate multimedia resources: video clips, flash, ppt	Very Important
13	Facilitate collaborative learning tools such as wikis	Very Important
14	Support virtual community building	Important
15	Allow update and redesign of assessment rubrics	Very Important
16	Provide means to create multiple roles in the system	Very Important
17	Contents are protected with password and other security protocols	Very Important
No.	System Usability and Technical Support Tool	Remarks
18	Has a simple layout that is relatively easy to navigate	Very Important
19	Use of icons and other graphics provide cues regarding usage	Important
20	Screen contents and labels can be modified	Very Important
21	Allow multimedia and visual resources into an online module	Very Important
22	Support moving courses to other categories	Very Important
23	Provide users with basic online support	Very Important
26	Supports open source	Very Important

Table 1: Summary of Respondents' Perceptions on LMS Functionality, Usability and as Technical Support Tool

Table 1 presents the perception of teachers regarding the use of Moodle as a learning and support tool. From the responses, it can be deduced that survey participants perceived that to come up with a successful implementation of blended learning in their classes, it is very important that the LMS being utilized provides support for the creation and subsequent posting not only of course materials, but also of online activities; that the teacher is able to monitor the performance of students; that the LMS provides support to maintain communication with students and provide regular feedback to them; that there is management of individual student participation and group collaboration; that the LMS supports use of various media in delivering content online; and that the contents are protected or that the LMS has support for security.

Moreover, in terms of usability and the LMS as a technical support tool, the survey respondents deemed it very important for the LMS to have a simple layout, and that objects that are placed in the LMS have labels that can be easily modified; that the LMS supports easy classification and reclassification of courses; and that the LMS allows easy use of visual resources, is open source, and with at least basic support.

As the survey was distributed after the teachers were given enough time to use the LMS in their classes (i.e. the survey was distributed toward the third of the semester when the study was conducted), it can be concluded from the responses that Moodle, as the LMS being used, is able to support the functionality, usability and technical support features that teachers need for the successful blended learning approach in an e-learning enhanced English Language Teaching.

These results are further reinforced by the feedback from the focus group.

One respondent stated that *“Moodle, as a platform to implement e-learning supported teaching, helps in providing more and better organized activities for students”*. Another intimated that *“the platform gives my students different ways to practice their knowledge... using the provided materials. It pushes them to think and challenge themselves (more)”*. One further said that *“... the interaction in the class prompts them (students) to look into Moodle to practice what they actually learnt... and then get back to a healthy classroom discussion”*.

In terms of the immediate change this approach to teaching can provide, many of the focus group members reiterated that ideas raised and discussed in the online discussion forum (in their classes) can be carried over to the discussion in class, and vice versa. This, the focus group members say, *“may create enthusiasm and interest in learning through a modern technique, although it may also create other practical issues that a distance (online) form of learning may not (immediately) find solution”*. Moreover, majority of the focus group participants commented that Moodle helps teachers in arranging or organizing the content of their courses by topics or weeks, which are easier for students to follow. The platform is also user-friendly in terms of user interface, which allows the teacher to design the course in a way that it will be more engaging to students.

Others, although they generally were receptive and see the positive potential e-learning can provide to support their teaching, commented that *“students should be given orientation in the use of Moodle (especially that they are new to the College environment), so that they would have proper understanding of its use and benefits”*. In this regard, one member commented that *“...for newbies, they (students) were focused on the discussion, but a bit confused when they start to navigate the LMS when looking for the appropriate information”*. Another one stated: *“For Level I students, this is totally new to them. Face-to-face cannot be eliminated at this time as it will complicate the lesson delivery. “Blending” Moodle with the traditional method is the best at this point.”*

Others emphasized that in terms of embracing technology, this form of learning allows the teacher to *“hold students to a higher level of standard as they are given a lot of practice... I (teacher) can make the quizzes more challenging and expect students to perform better as they are given more exercises and more time to practice”*. Others also emphasized that the platform allows teachers to provide online content, which is readily available and accessible to the students, anytime and anywhere. Moreover, focus group participants readily acknowledge that the platform provides the opportunity to provide students with extra materials so that they get more exposure in studying and using English. In this regard, one participant put it succinctly: *“Learner-centered education requires students to be involved and take*

charge of their learning; the materials provided in Moodle give them a chance to reflect on what they have learned in face-to-face learning environment. The wide choices provided to them give them an opportunity to take decisions. Moodle also helps in making connections with students and keeping in touch with them even outside of the classroom.”

Not all feedback from the focus group are positive though. In the use of e-learning in teaching, others were more skeptical, like the comment received from one of the members: *“Teaching is not just enhancing knowledge in the subjects we offer. It is unlimited knowledge we impart in our students in many areas to build up good human beings. It is obvious that this type of method will affect the traditional way of thinking as the distance it creates between the two parties – the learner and the facilitator will build an invisible wall between them. The philosophy of teaching and learning including the teaching culture, the environment we build, the rapport we maintain will be destroyed in the long run. As I believe, we need to change the teaching strategies as per our needs but MUST maintain and assure that nothing should destroy human relationships – the rapport between the teacher and the student. Face-to-face teaching still counts a lot.”*

Others say that *“e-learning (through Moodle) is a good way to improve interaction through technology... but it is by no means improving teaching standard; better interaction between teacher and student in whatever way is still the best way to innovate the teaching-learning process”*.

Although there is a mix of positive and somewhat negative feedback at the time the study was done, it cannot be denied that the majority of the focus group members’ feedback are in general terms positive, and moving towards the embrace of this proposed approach to teaching. As one focus group participant puts it, *“If fully and properly explored and implemented, technology will surely affect certain aspects of our current ways of teaching, especially the old ways of conducting lectures and discussions; however, the embrace of technology may be beneficial to the young generation who are more technology-savvy and who are more inclined to use technology to search for information”*.

And to summarize everything from the comment of another member: *“Whether we like it or not, change will happen. We must upgrade ourselves and be familiar with new trends. Since this is the time of Generation Z, we must meet the changing needs of our students to cope with the situation where technology becomes an integral part of everyone’s lives”*.

Outcomes

After the analysis of both survey and discussion forum data/information, the following guide is recommended for ELC teachers that wish to implement blended learning in their classes:

English Language Center Introductory Blended Learning Guide for Teachers

A. Moodle LMS Features to Consider

As Moodle is the college LMS platform, it is important for the ELC teacher to have an idea of the features that will be important for the successful implementation of blended learning.

The following are some of the features that the participants in this study gave focus on:

1. Grouping the information blocks either by topic or by week

Depending on how the teacher designed the course delivery plan, the teacher can divide the online content either by topic or by week in Moodle.

2. Upload of different types of course materials

Using Moodle, the teacher can upload even video and audio clips. This will be useful for student practice of listening skills, as well as general comprehension of the English Language. The teacher is also able to design tests that are like IELTS or TOEFL, which will give students a better chance of passing these kinds of tests.

3. Use of Online Grade Book

During the study, several teacher-participants emphasized the usefulness of having an online gradebook, as students can monitor the progress of their performance in class using the online facility. This makes it convenient for them to check their marks in different activities, as they can access Moodle anywhere.

4. Secure online platform

One thing that was noticed by the teacher-participants is the fact that Moodle has a variety of features to make quizzes secure: shuffling of questions and choices, providing a range of PCs (using IP addresses) where the exam could be opened, etc., that would not only make their job easier, but also ensure that assessments would be difficult to tamper with.

B. Blended Learning and Learning Management System Considerations

1. Enough time should be provided by the teacher, with the support of the technical team, to ensure that students know how to properly use the LMS platform. If possible, schedule of orientation outside of official class hours be planned by the Center for the students.

2. Teachers should have their own Moodle orientation to ensure that they know the features that would be useful to them, and they use these features in their classes properly.

3. Periodic workshops on blended learning in general should be also provided to the teachers to keep them abreast of new technologies other than the LMS platform (Moodle).

4. There should be an appropriate mix of face-to-face and online class activities and/or sessions, which should be reflected in the teacher's lesson plan or course delivery plan.

5. The teacher should maintain active communication with students outside of the classroom using the LMS platform to maintain student interest in the technology. This can be done through online discussion forums, wikis, and LMS messaging.

6. The teacher should use different kinds of content, as well as online activities in the Moodle platform to maintain student engagement with the course.

7. The teacher should design the online part of the course with emphasis on developing independent learning on the side of the students.

Conclusion

Data collected from this study resulted in the development of a very simple, introductory guide that can be followed by English Language teachers in ELC if they want to improve the probability of success in the implementation of an e-learning supported English Language class. These generalizations and recommendations were compiled from the feedback of study participants, which were mainly based on the practices they followed during the experimental phase of this study. The outcome of this study, although can be considered a guide, is just the initial step for the formulation of a more comprehensive framework for a full-fledged blended learning model that can be adopted by the Center. Although the guide recommended in this study is already envisioned to help ELC teachers in further improving their blended learning approach, the authors still recommend to continue this study and move one step further to be able to come up with a complete model that can be adopted not only by NCT ELC, but also by other English Language Centers in the Sultanate as well.

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