

## MOODLE: A BUILDER OF LANGUAGE SKILLS, METACOGNITIVE AWARENESS AND LEARNER AUTONOMY FOR ENGLISH LANGUAGE CLASSROOMS

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### ABSTRACT

*The onslaught of technology has brought numerous opportunities for the educator and student of this millennia. Teaching and learning English has undergone a metamorphosis in terms of how the subject matter is delivered and received. The use of Moodle as a virtual learning platform is not a new practice for English language educators who facilitate language learning through traditional classroom pedagogies and web-based instructional methods, or the otherwise known blended-learning. In fact, its usage is so widespread that it has developed into a learning environment that has become a compulsory complement to teaching and learning in many English language classrooms today. In this study, the researcher sets out to find out how pre-university students from various majors in Taylor's University, Malaysia, perceive Moodle as a language learning avenue. It evaluates whether these students recognize the effectiveness of Moodle in developing their English language skills, metacognitive awareness and autonomous learning. An online survey was administered to capture their attitude and personal feedback on learning language through various Moodle features utilized throughout the semester. The results of the research indicated that the students acknowledge Moodle as a language learning platform and are affirmative in their attitude towards how this platform builds metacognitive awareness and learning autonomy.*

**KEYWORDS:** Virtual learning, Moodle, English language skills, metacognitive awareness, autonomous learning.

### 1.0 INTRODUCTION

The general consensus on blended learning through virtual learning environments is that it caters to the diverse needs and wants of a generation that embraces technology as its second nature. The incorporation of web-based instruction in the English language classroom today has taken on a pivotal role in complementing if not, supplementing the traditional face-to-face teaching mode. The popularity of blended-learning via online platforms navigates teaching and learning towards one that enables students to indirectly control their progress instead of the educator directly controlling the outcome of a lesson. The notion of blended learning via virtual environments works on the basis that what students learn online will support what they learn face-to-face in class, and vice versa (Rovai & Jordan, 2004; Thorne, 2003).

As a commonplace strategy adopted by many EFL/ESL experts and institutions today, many policymakers and practitioners continue to question the effectiveness of learning the English language this way. In fact, Osguthorpe and Graham (2003) suggest that educators find that balance between online access to knowledge and face-to-face teacher-student interaction. Perhaps tipping the balance is still not an option in courses that are aimed to enhance language skills, but blended-learning has certainly made its mark in the industry, especially with educators looking for a niche in order to satisfy the needs and wants of their particular group of students.

In the light of this, institutions of higher learning are driven to adapt and use the various modes of information technology to not only effectively deliver their instructional materials but to also achieve the modules' learning outcomes. Hence, classrooms are more mediated today, than they were before. The present classroom scenario is built around the instructor utilizing Course Management Software (CMS), such as Blackboard and Moodle. Instructors are encouraged to use podcasts, online discussion groups and other technologies to engage and connect with students. This integration between traditional face-to-face format and technology-based learning is said to complement learning experience through an increased understanding and better student learning (Dillon & Gabbard, 1998). However, Sivanandan, Rajandram,

and Ho (2014) assert that as instructors, one must determine what technologies to use and how to use these new technologies appropriately for effective learning to take place. Therein the challenge.

In the wake of embracing trends versus student learning outcomes is the need to fulfil the students' wants in a manner that best suits the students' way of learning. While this phenomenon which is steep in virtual and digital delivery of learning has cast a widespread re-thinking and re-evaluating of pedagogies, it has also certainly brought about a new wave in education. Whilst redefining learning methodologies and learning environments, it has radically transformed the kind of skills, knowledge and facility with e-learning tools (Dofs & Hobbs, 2016). The impact can be said to be significant on both the educator, as the moderator cum facilitator, and the student at the receiving end. Between practitioners having to contend with this new dimension in the field and the student coping with the decrease in physical space for learning begs the question as to whether students recognize and acknowledge what and how they are learning.

More often than not, research has been devoted to showing educators the countless ways in which MOODLE and other online platforms can be used to teach. The strategy is to conquer with more and more diverse activities with the hope of not only reaching out to more students of various backgrounds but also to students who absorb and engage with information differently. Feedback has been more teacher-centered than it has been, student-centered driving educators and teachers alike to focus more on their roles as facilitators and mediators of sorts (Lamb, 2014; Murray, Fujishima, & Uzuka, 2014; Narum, 2013)

In the light of this, this study explores the students' feedback in terms of targeted responses towards specific abilities: language skills, metacognitive awareness and learner autonomy. The study investigates whether the student recognizes what he or she is learning and how it is learnt in relation to these three specific criteria. The method of employed in this study is quantitative research and statistical data analysis. The main hypothesis of the study is that students are conscious that Moodle develops language skills, metacognitive awareness and learner autonomy.

## **2.0 LITERATURE REVIEW**

### **2.1 Virtual Learning**

Virtual Learning is the umbrella term used to describe a number of course management systems (CMS) that incorporate internet and web technologies to complement education programmes. Currently there are various terms associated with virtual learning, such as Virtual Learning Environment (VLE), Web Learning Environment (WLE), Managed Learning Environment (MLE) and Networked Learning Environment (NLE). These alternatives terms, as pointed out by Navaporn (2010) are increasingly popular throughout institutions of higher learning as the reliance on blended learning today is gaining pace. The out-of-class appeal that virtual learning has, has triggered further research into its potential to support the acquisition of language skills, learner autonomy and teaching and learning language as a whole. Researchers have argued that substantial evidence and more conclusive associations between forms of CMS applications and effective language learning needs to be investigated should a more grounded and sound deduction be derived (Benson, 2001; Chapelle, 2001). Modular Object-Oriented Dynamic Learning Environment (MOODLE) is one such platform that has drawn a lot of attention since its advent and continues to be evaluated and re-evaluated as an approach to virtual learning.

### **2.2 Moodle**

Moodle was designed to support a social constructivist approach to teaching and learning which includes inquiry-based, collaborative interaction and construction of shared knowledge (Brandl, 2005). As an open source e-learning platform designed by Martin Dougiamas, the programme has undergone upgrades over the years, and refined to suit the needs and wants of various language learning environments such as English for Academic Purposes (EAP), Second Language Acquisition (SLA), English as a Second Language (ESL), English as a Foreign Language (EFL) and English to Speakers of Other Languages (ESOL). The basis of the creation Moodle still subsists on its efforts to promote acquisition of new knowledge and construction of the students' own cognition during the process of interaction with each other and with the educator (Jonassen, Peck, & Wilson, 1999). In other words, Moodle is still seen as the platform that is aligned with the theoretical foundations expounded by Piaget and Vygotsky.

### 2.2.1 Language Skills

In line with a constructivist paradigm, previous work have set out to explore the potentials of Moodle as a builder of English Language skills. Robertson (2008) approached this endeavor with the educator in mind when his study revealed that support activities vis-à-vis Moodle not only helped the learner through a recursive writing process but also assisted the educator's where organization, implementation, distribution, communication and assessment were concern. In Symasuddin and Alimin (2014) the central focus is on how the educator can leverage on the use of Moodle in TOEFL based courses. Similarly, this mode of research is further intensified when educators continue to experiment on whether teaching writing and reading courses can work through Moodle.

This practice is seen in Nagamoto (2006) with English majors, Zhang and Wu (2009) with EFL students in China and Suvorov (2010) with ESOL students. What can be observed here is the trend in using Moodle as reliable blended-learning platform to improve students writing abilities. Further research transfers these language skills into university and career skills that can be used to acquire critical thinking skills enabling the teacher to enhance their effectiveness as facilitators. (Adas & Bakir, 2013; Cao, 2017; Gluchmanova, 2016; Tuzlukova, Al-Busaidi, & Burns, 2017) This practice is seen across foundation studies to tertiary level education in English language teaching and learning.

### 2.2.2 Metacognitive Awareness

The term 'Lifelong learning' has been debated over and again by various sources given its importance in the education system and the need to achieve it in the classroom (Blewitt & Cullingford, 2004; Kolb & Kolb, 2005; Schon, 1983). Metacognitive awareness seeks to gauge lifelong learning by tapping into the students' self-reflection about the value of their understanding and their wants to go beyond (Dunlap & Lowenthal, 2011). In essence, it represents the learners' ability to become actively responsible for their own learning strategies and processes by reflecting upon their experiences as a continuous learning cycle (Dunlap, 2005; Mani & Mazumder, 2013).

The evaluation of Moodle via its blogs, wikis, and other applications has been experimented on in a number of ways to test metacognitive awareness. Drange, Burgess, Dysvik-Brandt, Nor and Irons (2016) explored the benefits and drawbacks via summaries from lecturers with regards to students' reflection patterns. The findings were directed towards the educator looking at the metacognitive awareness of the students via their reflections. However it is noteworthy that student reflections were gathered in a manner that evaluated the blog and wiki from a designs perspective that focused on ease of editing, posting and storing. Similarly in Miyazoe and Anderson (2010), the comparative study between wikis and blogs were conducted to ascertain the ease of use between the two formats. In both cases, the awareness is directed towards reflecting on their experiences which gravitate towards the psychological and systems dimensions, rather than the cognitive.

### 2.2.3 Autonomous Learning

Learner autonomy can be seen to emphasize independent-learning and the moving away from teacher-centered practices. While there are varying degrees of autonomy enabled by different online activities, there is a consensus that it is about allowing the learner to construct and dominate a large portion of knowledge in any context (Brandl, 2005; Brown, 2007; Ding, 2012; Papastergiou, 2006; Tam, 2000). In Ketteringham (2015), the researcher targets the practitioner's stance in ensuring Moodle fosters learner autonomy through discussions. The success of the practice is evaluated by the number of visits a student makes on the site suggesting whether or not an engagement activity is effective in promoting learner autonomy. Jing (2016) in her study of 52 language learners derived mix feelings where autonomous learning was concern. While there was an indication that they strongly agreed that Moodle-based platforms promote the use of search engines to find answers to problems, a whopping 89% still felt that their teachers were more effective in providing knowledge. This not accounts for the traditional spoon-feeding teaching style students are accustomed to in certain regions as Jing points out. This also suggests the how teacher autonomy needs to be fine-tuned as a struggle to balance this student-teacher engagement is crucial in determining learner autonomy in a language learning environment is maximize.

Learner-autonomy continues to be the central agenda of why online platforms were introduced in the first place. It has been tested on prospective teachers to learn about how learner autonomy may be

perceived by students using Moodle as seen in Musa, Mohamad, Craig, Jaewoo, and David (2017) to its ability to enable students to take-charge of their own monitoring of revision courses as seen in Iwata, Clayton, and Saravani (2017). It is a delicate power-struggle in a way between the student and the teacher.

The review of previous literature on Moodle celebrates the psychological and systems domains which provides feedback to the teacher. It is generated to rate the effectiveness of the platform as a language learning tool based on student performance, number of hits, quality of discussions and so on. While there have been a number of research devoted to finding out how students perceive Moodle as a English language teaching and learning tool. However, responses are more often than not tabulated in a form that does not showcase the students' ability to point out what they have actually learnt in technical terms.

In Lai & Aksornjarung (2017), the student responses are geared towards finding out their attitudes and motivation with regards to using the Moodle platform. Mohamed Zain, Ab Wahab and Md Yunus (2018) on the other hand, focuses on compiling the experience facet of the endeavor. Similarly, the practice of gathering responses to understand student preferences as seen in Adi Kasuma, Mohamad Saleh and Akhiar (2018) perhaps enables designs that promote greater interactivity, participation and collaboration. It also allows for theorizing of literacies as Hui (2018) points out but not information that indicates that the student is aware of what he is actually cultivating through this process. This points at the need to further delve into student responses that can pinpoint specifically what they are learning and how it is being learnt. Thus, this paper investigates the students' cognitive feedback in relation to language skills, metacognitive awareness and learner autonomy.

### 3.0 METHODOLOGY

In order to achieve the objective of this study, a survey-based questionnaire was used as research method. The target students' population in this study was from a private Malaysian university in Selangor, Malaysia due to accessibility and proximity to the researchers. Using the convenience sampling method, 153 students comprising of females (n=71) and males (n=64) from the pre-university programmes participated and completed the online survey. Apart from that, these students had used and are currently using Moodle to learn and practice English.

An online questionnaire comprised of adapted questions from Gulbinskienė, Masoodi, and Šliogerienė's (2017) research paper was used for this study. Excluding demographic information, the questionnaire had four sections (20 items); Moodle as an environment for enhancing student's motivation to develop language learning skills, Moodle as a confidence building environment in language learning, Moodle as a tool in fostering metacognitive awareness and promoting learner autonomy and feedback on usage of Moodle as an online English language learning environment. Students are to respond by selecting "1" for "Yes" and "2" for "No".

The online questionnaire (Google Form) was posted on their English module page on Moodle. Students were asked to complete the online questionnaire two weeks before the end of their semester. Administering the survey online increased accessibility as it gave respondents various ways to access the survey at anytime and anywhere such as through their mobile phones, laptops, tablets, etc. Data collected from the online questionnaire were analysed using basic statistical measurement. The Statistical Package for Social Science (SPSS20) software was used for statistical analysis.

#### 4.0 FINDINGS & DISCUSSION

The following are the responses received from the survey completed by the students.

ITEMS	YES	NO	MEAN	STD. DEVIATION
Learn autonomously only with the direct and precise teacher instruction	123 (91.1%)	12 (8.9%)	1.09	.286
Promote my autonomy when I have some choice in the activities I do	122 (90.4%)	13 (9.6%)	1.10	.296
Develop my ability to evaluate my own learning.	123 (91.1%)	12 (8.9%)	1.09	.286
Learn how to learn which develops my autonomy	119 (88.1%)	16 (11.9%)	1.12	.324
Promote desire to continue learning through sourcing for other materials on the Internet	124 (91.9%)	11 (8.1%)	1.08	.275

*Table 1: Students' Evaluation of Moodle as an Online English Language Learning Environment*

Table 1 shows students' evaluation of Moodle as an online English Language Learning Environment. Based on their responses, more than 80% of students saw Moodle as an online learning avenue to nurture their metacognitive awareness, leading to promotion of autonomy in how they learn, make decisions and assess their respective learning need. It was also apparent from the table that 91.1% of students learn autonomously only with the direct and precise teacher instruction. This also accords with findings in Jing's (2016) study where 89% language learners felt that their teachers were more effective in providing knowledge. This gives rise that the teacher is still a prominent figure in the process of education and the cultivation of autonomy for students in their learning process, in this case English language skills development. However, teachers need to find a balance in encouraging students to be autonomous in their language-learning journey.

Majority of students, 91.9% indicated that Moodle promotes the desire for continued learning by sourcing out other materials on the internet. This is a good step in enabling students to make conscious efforts in taking ownership for their own language skills development. It can also be seen as a sign of motivation within the student to satisfy their language learning curiosity and need. However, only 88.1% believe that Moodle can cultivate their autonomy by learning how to learn. Even though it is still above 80% it is relatively lower than the responses received for other statements within this category. Despite this, Moodle is seen as a tool that promotes student autonomy when choices in activities are offered (90.4%). This corresponds with Gulbinskienė, Masoodi and Šliogerienė's (2017) study as they cite Benson (2011) and Holec (2008) informing that students' autonomy increases the quality of language learning when learning alternatives and opportunities are provided in and out of the classroom. With options provided to students, motivation to develop language learning will follow.

The ability to be self-aware and self-assess one's own learning process is an important metacognitive skills for a learner to possess. From the responses received in this study, a positive outcome (91.1%) has been seen in the usage of Moodle as a language-learning environment. With this in mind and thoughts by Mani and Mazumder (2013), Lal (2011) and Dunlap (2005), Moodle has the ability to enable language learners to be actively accountable for their own learning strategies and tactics through the development of self-reflection. This would also enhance their development in English language skills and experience as a lifelong learner in the language. From the analyzed student responses, we can see that the students were conscious that Moodle was able to develop their metacognitive awareness, learner autonomy and language skills development.

ITEMS	YES	NO	MEAN	STD. DEVIATION
Enhance your motivation to write in English	121 (89.6%)	14 (10.4%)	1.10	.306
Enhance your motivation to read English materials	120 (88.9%)	15 (11.1%)	1.11	.315
Enhance your motivation to communicate using English	118 (87.4%)	17 (12.6%)	1.13	.333
Enhance your motivation to increase knowledge and skills in English through collaborative learning activities and tasks	125 (92.6%)	10 (7.2%)	1.07	.263

*Table 2: Students' Motivation in Developing Language Learning Skills*

Data presented in Table 2 clearly shows that over 80% of students agree that Moodle motivates them to develop their English language learning skills through writing (89.6%), reading (88.9%), communication (87.4%) and collaborative learning (92.6%). This is similar to the responses received in Gulbinskienė, Masoodi and Šliogerienė's (2017) study where Moodle is seen as a tool motivating students to develop their English language skills. Echoing Brandl (2005), Moodle has served its purposes through collaborate learning and construction of shared knowledge in motivating students to increase their knowledge and skills in English. By the responses provided by the students, we do see that they were cognizant of the motivation that Moodle provided in developing their language learning skills.

ITEMS	YES	NO	MEAN	STD. DEVIATION
Enhance your confidence to write in English	121 (89.6%)	14 (10.4%)	1.10	.306
Enhance your confidence to read English materials	116 (85.9%)	19 (14.1%)	1.14	.349
Enhance your confidence to communicate using English	120 (88.9%)	15 (11.1%)	1.11	.315
Enhance your confidence to increase knowledge and skills in English through collaborative learning activities and tasks	127 (94.1%)	8 (5.9%)	1.06	.237

*Table 3: Students' Confidence in Developing Language Learning Skills*

In Table 3, we see similarity in responses as Table 2, as over 80% of students agreed that Moodle increases their confidence in writing, reading, communication and collaborative learning in English, 89.6%, 85.9%, 88.9% and 94.1% respectively. This corresponds with findings in Gulbinskienė, Masoodi and Šliogerienė's (2017) study where Moodle creates a confidence-building environment for English language skills development. This results also echo views of Nagamoto (2008), Robertson (2008), Wu (2008), Suvorov (2010) and Syamsuddin and Alimin (2014) in which Moodle assists learners' in developing their writing process. In this case, we do see that students were aware that Moodle built their confidence in their language skills development. When confidence is felt or built, students are more likely to use and further develop their English language skills.

ITEMS	YES	NO	MEAN	STD. DEVIATION
Makes learning English easier	127 (94.1%)	8 (5.9%)	1.06	.237
Have a more positive attitude toward learning English	121 (89.6%)	14 (10.4%)	1.10	.306
Learn new words in English.	121 (89.6%)	14 (10.4%)	1.10	.306
Ensures equal opportunity for all students to participate in	126 (93.3%)	9 (6.7%)	1.07	.250
Increases social interaction among students during their learning process	116 (85.9%)	19 (14.1%)	1.14	.349
Makes learning English more interesting	119 (88.1%)	16 (11.9%)	1.12	.324

Table 4: Students' Feedback on Usage of Moodle Platform

The overall students' feedback on the usage of Moodle (Table 4) was good as more than 80% of students acknowledge that English language activities on the Moodle platform are helpful and interesting. The responses indicate students' awareness of the benefits Moodle provided through the language activities towards their language skills development. Apart from making learning English easier (94.1%), Moodle has also created a more positive attitude of students toward learning English (89.6%). The response rate of 89.6% indicates that this online learning platform has enabled students to acquire new words in English. Clark (2013) highlighted that utilizing both online technology platforms and overt teaching helps increase vocabulary knowledge and retention for English language learners.

An interesting point noted was that Moodle provided an equal opportunity for all students to participate in (93.3%). With limited classroom time allocated for teaching and learning for English in university, Moodle provides an environment to overcome this situation. Furthermore, Moodle would serve as a venue for introverts or those who are shy to use the language in a public environment to develop their language skills. Kavaliauskienė, (2011) stated that while Moodle provides numerous benefits, it also cultivates student learning and fosters communication between learners and communication between teachers and learner. From the students' responses received, it also supports that Moodle enabled social interaction among them during their learning process (85.9%). Interactions would definitely build language abilities among language learners and a majority of students in this study attested that Moodle enabled this for them.

## 5.0 CONCLUSION

The virtual learning environment has enabled language learners to access and develop their knowledge and skills 24/7 anywhere and anytime through a variety of activities. As indicated by Clark (2013), Gainer and Lapp (2010, p.2) highlighted that "inclusion of new literacies needs to become part of our instructional base if we want to engage students in motivating, and purposeful learning experiences". In this study, that virtual learning environment was Moodle for English language learning purposes. Through the analyzed findings and discussion, we see the aim of the study has been accomplished. Students in the study did acknowledge Moodle as a language-learning platform and were affirmative in their attitude towards how this platform builds metacognitive awareness and learning autonomy. Thus, the main hypothesis posed at the beginning of the study has been achieved.

With proper balance of teacher instruction and meaningful language-based activities and resource made on Moodle, this learning platform would be beneficial for students in language skills development, autonomy and metacognitive awareness. It would also build on students' own cognition during the process of interaction with each other and with the educator (Shuell, 1988; Bai, 2008; Jonassen, 1991) as well as compliment what they have learnt face-to-face in the classroom (Thorne, 2003; Rovai & Jordan, 2004).

With all this in mind, we can conclude that students were aware that Moodle fosters a successful language-learning environment, as it enabled them to take charge of their language skills development,

become autonomous as well as be conscious of their English language-learning journey. Moodle is also recognized to have boosted their motivation and confidence in developing their English language skills individually and collaboratively. Analyzed students' responses do show that students are conscious that Moodle develops their language skills, metacognitive awareness and learner autonomy in their English language-learning journey.

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