LMS (i-LEARN) VERSUS WBI (BLOG) AS TECHNOLOGY ENABLER TOOLS FOR INSTRUCTIONAL PRACTICES: A COMPARATIVE ANALYSIS OF LITERATURE

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ABSTRACT

This study investigates the differences between the applications of learning management system (LMS) and web-based instruction (WBI) as technology enabler tools applied in Malaysian higher education context. Then, by referring to one of the examples of LMS, i-Learn, and WBI, blog, a comparison is made between the strengths and weaknesses of using LMS and WBI for instructional practices in English language teaching (ELT). Based on the conduct of comparative analysis between both systems, the researchers intend to propose the relevant platform that is more effective for ELT. This paper adopted a systematic literature review on the definitions and usages of LMS and WBI apart from looking at the existing studies about the strengths and weaknesses of these two different applications. Finally, the future research directions and the potentials of blog as the recommended form of WBI are highlighted as the conclusion.

Keywords: LMS; WBI; technology enabler tool; ELT; i-Learn; blog

1.0 INTRODUCTION

E-learning as defined by Ibrahim Almarashdesh, Nur Fazidah Elias, Noraidah Sahari and Nor Azan Mat Zin (2013) refers to the use of a wide range of information and communication technology (ICT) applications, which encourage the process of learning, support communication in learning settings, assess learning activities, manage resources, and create educational materials. Campbell (2003) emphasises on the benefits of utilising e-learning in English language classrooms, whereby it can initiate the individuals to explore the English websites apart from interacting with the community in the cyberspace.

As cited in Elango, Gudep and Selvam (2008) studies conducted by some educational experts (Mangan, 2001; Rosenbaum, 2001; Smith, 2001) have found that the online environment is "more interactive in nature than the traditional ones" (p. 33) due to the fact that it caters to the slow learners who actually require "more response time to participate". Cited in Chen (2005), Hensen (2001) emphasises on how online interaction can be more beneficial especially when it concerns the learners' willingness to speak up more in comparison to a traditional face-to-face interaction in class. According to Chen, Liu and Wong (2007), employing computer assisted language learning (CALL) and computer-mediated communication (CMC) to

enhance language teaching are advantageous for both instructors and learners alike due to various functions enabled in the synchronous and asynchronous systems.

Furthermore, Murray (2003) highlights on the usefulness of learning portal as a tool to ease the learning process, which is highly required by learning institutions. Most local universities in Malaysia opt for LMS since it is made readily accessible for all administrators, instructors and students. Though the features like thread discussions, shared files, and forums are enabled on LMS, it would not cease in fascinating the learners to play an even more active role in acquiring knowledge. However, these features were found to be not that supportive due to many setbacks hindering the learning process to progress further effortlessly (Trayek, Sariah, & Hassan, 2013). These LMS-related setbacks include the lack of financial budget, compatibility of software and hardware, and technical materials (Trayek et al., 2013).

On the other hand, a WBI is usually developed independently by an instructor via a web 2.0 application for instructional purpose. It gives a room for the instructor to innovate rather than to use the existing technological tool by creating an online learning environment at one's own pace. The related web resources are integrated based on the course or programme in the forms of web widgets or hypertexts. Nonetheless, as a web-based instructor in university, the lecturer or instructor has to be proactive by playing multiple roles in setting up and maintaining the self-developed instructional tool like a blog for instance. The act of up-taking the role as an instructor and a blogger to maintain the blog may take up a lot of time and effort especially to respond to any queries or be involved in chat sessions taking place virtually between the instructor and learners.

1.1 Problem Statement

LMS has its drawbacks in terms of a static interface design, user dissatisfactions, and an under-utilised system, which are cited as the debilitating factors of ineffectiveness of LMS (Hoh, Choo, & Siew, 2010; Ibrahim Almarashdesh et al., 2013; Jowati Juhary, 2013; Trayek et al., 2013). For instance, the lack of immediate feedback in the LMS discussion board demotivates the learners to use the system (Nor Azura Adzharuddin & Lee, 2013). Contrastively, though WBI has been widely used among the lecturers, the research on its uses and effectiveness are still at infancy stage. As such, there is a need to look at the learners' lacks and necessities in utilising both LMS and WBI in teaching and learning practices.

Most studies indicated that LMS has a bearing on the whole learning process; however, WBI through blogging also promotes positive impact to the respective learning condition. Learners of today are exposed to advance technology that requires them to be more verbal to ensure learning is modelled and tailored according to their needs and lacks. Based on this premise, a particular technology enabler tool has to be identified and propagated amongst the educators and instructors. Significantly, between LMS and WBI, some of their strengths and weaknesses would have to be shed some light upon since the adoption of these technology enabler tools will only benefit the users of the systems in the end. Therefore, there is a gap between the studies that look into the utilisation of these two different technology enabler tools for instructional proposes, particularly in ELT.

1.2 Objective of Study

The purpose of this study is to conduct a comparative analysis of literature on LMS and WBI in order to highlight the differences that might influence the end users: the instructors and learners. Unconfined by place and time, the comparison of these two different online learning environments will yield a list of distinctive features of LMS and WBI, which can benefit the instructors and learners in higher education in general. Later, the findings from the analysis can be served as the benchmark to scrutinise the two e-learning platforms for the teaching and learning of English language courses. As such, this paper has opted i-Learn as the existing LMS applied in UiTM and blog as the most popular web 2.0 platform of WBI and highlight each strengths and weaknesses by observing its relevance to the instructional practices in ELT.

2.0 LITERATURE REVIEW

2.1 Learning Management Systems (LMS)

The adoption of LMS as an institutional e-learning platform has been proven to outdo the traditional learning as reported by Means, Toyama, Murphy, Bakia and Jones (2009). Based on the US Department of Education 12 year-meta analysis research, tertiary education students who were exposed to online learning in general have fared better than face-to-face instruction. Among the commonly used LMS platforms are Blackboard, Drupal, Joomla, Moodle, and Sakai. The LMS, as cited in Mas Nida Md. Khambari, Moses, Rohoullah, Wan Zah Wan Ali, Wong and Ahmad Fauzi Mohd Ayub (2010), refers to a "set of tool and framework that allows the relatively easy creation of online course content and the subsequent teaching and management of that course" (p. 100). Moreover, LMS is also defined as "a useful content distribution system, where instructors can distribute course materials and interact with students at a distance" (Ibrahim Abood Almarashdeh, Noraidah Sahari, Nor Azan Mat Zin, & Mutasem Alsmadi, 2010, p. 81).

Institutions of higher education have long advanced into the development of a LMS portal for instructors and their students to use. Ahmad Fauzi Mohd Ayub, Rohani Ahmad Tarmizi, Wan Marzuki Wan Jaafar, Wan Zah Wan Ali and Wong (2010) in citing the work of Alias and Zainuddin (2005) emphasise that LMS is a mode for aiding "the planning, distribution and evaluation of a specific learning process" (p. 101). Hoh et al. (2010) provides a comprehensive summary of a few selected LMS adopted by many Malaysian higher learning institutions. Multimedia University uses its multimedia learning system called MMLS, which its communication tools include chat room, discussion board, e-mail, and live video. Similarly, Universiti Tunku Abdul Rahman (UTAR) opts for WBLE created using Moodle, which provides a blog space for the utilisation of its lecturers and students. Open University Malaysia (OUM) has its own system known as myLMS, which is equipped with its own radio station service, e-services, e-mail services, application documentation, and the links of university administration services.

Taylor (2006) reviewed Moodle and found that it is freely downloadable, modifiable, and distributable; its advantages include some changes that are rather significant between its version releases. According to the observation of Hoh et al. (n.d.), while Moodle is also not difficult to be learnt and operated, it offers a glitch for installation amongst the novice users with reason cited having too many technical glossaries in the installation instructions. Meanwhile, another example of LMS namely Blackboard, provides a web-based learning environment for both instructors and learners to access in real time. This system is also

accessible among the Blackberry smart phone and iPhone users. As such, instructors and learners' communication is not merely limited in an online environment but "transcends beyond real-time" source. For the time being, Universiti Teknologi Malaysia (UTM) and Universiti Malaysia Sarawak (UNIMAS) are two instances amongst the many local higher institutions that have opted for Moodle; Blackboard has its users from the private higher institutions such as Universiti Tun Hussein Onn (UTHO) and Sunway University College.

Concerning about the effectiveness of LMS in Open University Malaysia, Kota Bharu campus, Khadijah Abdul Rahman, Siti Aswani Mohd Ghazali and Mohd Nasir Ismail (2011) reported a few factors contributing to the ineffective use of LMS amongst the novice, knowledge intermittent and expert users. Khadijah et al. (2011) also suggested that LMS users can be classified into three categories: learners, instructors, and administrators. Besides, LMS is also responsible in providing an integrated platform for content and delivery among the users. In addition to this, Jowati Juhary (2013) examined the issues of awareness and application of LMS at the National Defence University of Malaysia (NDUM). She found that the academics from the NDUM have reservations about using the LMS due to the poor organisational and structural supports.

In addition, UiTM's i-Learn portal is developed as an effort towards the achievement of blended learning. It was launched on 30 December 2005 with the purpose to make UiTM a world class university, which is equipped with outstanding scholars, and academic excellence through e-learning. In addition, it provides the students as well as the lecturers a platform to make the process of teaching and learning easier and more flexible. On top of this, computer mediated-communication as presented on i-Learn portal extends the classroom discussion with the construction of an asynchronous discussion board. This could be another good way to help in developing the learners' ability to express their train of thoughts aloud and their agreement or disagreement with other people's view (Opp-Beckman & Kieffer, 2004).

2.2 Web-based Instruction (WBI)

Web-based teaching has caught the attention of instructional designers, particularly because of the flexibility it offers to the learners. They can usually follow the links of instructional materials that have been suggested by their instructors. The flexibility feature of WBI takes into account of the learners' perceived needs and desires. In fact, the suggested materials collaboratively designed by the instructors are present with specific links to be followed by the learners. Based on these ideals that a web-based instruction offers its learners, they are assisted to play a more active role in their learning process. Indirectly, the learners are provided with an experiential space for them to toe their own thoughts and insights with the overwhelming presence of web-based instructions (Lin & Hsieh, 2001).

More importantly, as reported by Nadzrah Abu Bakar (2009), the interactions that take place between instructors and learners in the web-based instructions have actually boosted the learners' confidence, especially where language learning is concerned. As cited in Nadzrah Abu Bakar (2009), Lightbown and Spana (1999) reported that low proficiency students have always found learning English language as a challenging task due to the inhibitions they face in a less interesting and interactive learning environment. Hence, it is pertinent that certain measures have to be taken in order to motivate the students to actively participate in a learning environment that will boost their interest in pursuing the language.

Blogs (Blogger, Edublogs, MySpace, and WordPress), podcasts, wikis, and social media websites such as Facebook and Twitter are some instances of web 2.0, which have given birth

to WBI adopted by educators in their teaching. The choice of using blog as a language learning tool has paved ways and created opportunities for learners to actively engage themselves in different stages of learning process. In fact, the pedagogical tool known as blog, as suggested by Pinkman (2005), plays "a more communicative role than the less interactive CALL applications" (p. 14). Seitzinger (2006) affirms the idea that blogging permits the learners "to reflect on their perceptions of the learning materials and on their own learning process" (p. 6).

Moreover, Godwin-jones (2006) propagates various benefits of adopting blog as a writing tool; whereby the process not only encourages feedback but also represents both writing and reading activities. Other than stimulating debate and critical analysis as well as encouraging articulation of ideas and opinion, blogging also offers opportunities for collaborative learning. Learners can develop skills of persuasion and argumentation which in turn, creates a more student-centred learning environment. Furthermore, Nadzrah Abu Bakar, Hafizah Latif and Azizah Ya'acob (2010) suggest that blogging promotes learners to be the collaborative knowledge builders; they are able to actively participate in their own learning, determine their learning goals, and share their knowledge.

3.0 METHODOLOGY

Tranfield, Denyer and Smart (2003) proposed that mapping, consolidation, and evaluation of a specified field is pertinent to have a clearer overview of the gaps and opportunities in relation to the respective field analysed. Cook, Mulrow and Haynes (1997) propagate their view that a systematic review aids the practitioners to be updated with the comprehensive literature. By making a large body of evidences more concise and supportive, the differences can be surfaced and highlighted among the related studies with similar focus. In line with the research objective, this study opted for conducting a systematic literature review on the definitions of LMS and WBI, apart from looking for their strengths and weaknesses.

4.0 FINDINGS AND DISCUSSION

4.1 Strengths of Using LMS (i-Learn)

Nor Azura Adzharuddin and Lee (2013) highlight the benefits of LMS to the instructors in several ways: content is prepared and delivered; student participation is monitored; students' performance can easily be accessed via online. The interactive features like threaded discussions, video conferencing, and forums for discussions are likely to appeal to its users for being a web-based learning tool, which eases both the users and its adopters. Moreover, research has indicated that there are many benefits that await the users in an interactive learning environment (Ahmad Fauzi Mohd Ayub et al., 2010). Moreover, Issham Ismail, Temoli Gunasegaran and Rozhan Mohd Idrus (2010) highlight the benefits of an e-learning portal to adult learners in University Sains Malaysia whereby a majority of the users in the study agreed that they had gained a lot from the use of the portal.

If the advantages of LMS reported for distance learners where face-to-face interaction is minimal (Issham Ismail et al., 2010), there could be more benefits in store for UiTM learners who not only are involved in active classroom participation but also online learning environment. In relating to the use of i-Learn as a LMS amongst the students of UiTM, it also propagates the collaboration between the language instructors and their students besides being a platform for content providers. The accessibility of the i-Learn is made available via the Internet; thus, it enhances the language learning opportunities of the students to download

materials pertaining to their subject matter, collaborate with their instructors in language projects, as well as discuss assigned tasks in forum.

4.2 Weaknesses of Using LMS (i-Learn)

As there are advantages, some disadvantages are also detected in this virtual learning environment. The findings of Kearsley (2002) and Devi (2001) suggest some limitations to the flexibility of delivery and learning of an online portal. Moreover, the high commitment from both instructors and learners during a specific time frame is highly demanded; thus, it proves to be a hindering factor to its usage capacity. Adaptive and customisable features are the two essential characteristics of a technology enabler tool that must be featured in order to avoid the under usage of multimedia materials made available on the system. Unlike the WBI, LMS does not provide any room for the users to customise or modify the system. Since these are the underlying factors to cushion the idea of the LMS ineffectiveness, it is also imperative to be aware of these LMS features that could be the contributing factors towards the success of its implementation when it comes to instructional purpose.

On the other hand, where i-Learn is concerned, Mariam Setapa, Khairunnisa Rahman, and Noorita Mohammad (2012) reported that the system is cited to have some problems. These include the ineffective use of the system (frequent server downtime) and the degree of complexity in utilising such a system as stated by the respondents in the study (Mariam et al., 2012). The other reasons to justify the lack of enthusiasm among the i-Learn users in the study are the inaccessibility and the unawareness of the system tools. The under-utilised multimedia materials and interactive features available in the LMS portal are justified by the lack of enthusiasm and commitment of both instructors and students, restricted to a specific time frame and limited capacity for its usage as reported by Ibrahim Abood Almarashdeh, Noraidah Sahari, Nor Azan Mat Zin and Mutasem Alsmadi (2010).

In fact, Mah, Irfan Naufal Umar and Thomas Chow (2013) stated that language enhancement was not made possible due to the lack of scaffolding applications namely dictionary, translator, chat room, and language games to assist the aforementioned skills. Restricted workplace existing on i-Learn limits and debilitates the instructors to personalise their instructional materials. Below is the screen shot of i-Learn portal as an example of LMS for teaching English proficiency courses.
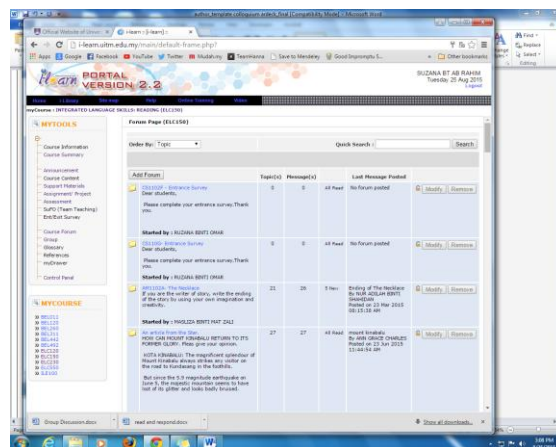

Figure 1: A screen shot of i-Learn portal as an example of LMS

4.3 Strengths of Using WBI (Blog)

Blog is one of the most common Web 2.0 platforms that can be developed and designed into a WBI. Among all the blogging platforms, Wordpress is the world's favourite software with more than 68 million websites. The advantages of using Wordpress as compared to Joomla or Drupal range from its characteristics: accommodating multiple authors, easily customisable, flexible, and user-friendly. Blogging promotes collaborative learning, which in turn stimulates critical thinking to take place amongst the learners especially when the readership is not just limited to their language instructors. When the learners are involved in the process of blogging, they are also more accountable towards the learning process under the guidance of their instructors.

Moreover, the use of blogging initiates the learners to respond and engage in conversations that are present in the form of discussion boards; by doing so, it enables social interactivity to take place amongst them. The students collaboration among themselves as well as the teachers' and Internet users' accessibility to the blog have positively triggered the process of knowledge construction. More importantly, it is the interactive features of WBI that would stimulate the learners to be more critical, thoughtful, and judgemental of the received feedbacks. Besides, they are able to review their own piece of writing and give feedback apart from addressing different audiences to the blog (Grami Mohammad, 2012). These have become the fundamental contributions of WBI in ELT.

4.4 4.3 Weaknesses of Using WBI (Blog)

Despite being advantageous, using blog as a WBI application in ELT has its shortcomings. To be effective, the instructional tool cannot be simply handed over to the learners without prior instructional plan with achievable learning outcomes. Well-prepared and organised language activities are needed to appeal to the learners' senses (Nadzrah Abu Bakar, 2009). Thus, the investments of time, endeavour, and attention are highly demanded by the language instructors.

Furthermore, in order to have a higher volume of engagement among the learners, learners require technical supports every now and then (Hourigan & Murray, 2010). The failure to do so might only result in the low proficiency leaners shying away and losing their confidence altogether (Nadzrah Abu Bakar et al., 2010). Below is the screen shot of WBI (Blog) that is taken from the e-Gakusei Blog maintained by one of the language instructors in UiTM for teaching English proficiency courses.
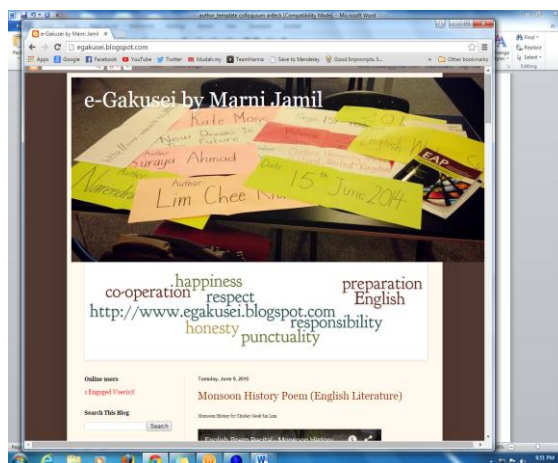
Figure 2: A screen shot of WBI using blog (http://egasuki.blogspot.com)

5.0 CONCLUSION

Based on the comparative analysis of literature, several considerable dissimilarities as well as strengths and weaknesses of both LMS and WBI have been highlighted, which offer the instructors in higher education context an alternative for adopting the most appropriate technology enabler tool for their instructional practices. Due to the predicaments faced by many instructors in higher education where the use of LMS is concerned, there is a high possibility that WBI might just be a potential alternative with a more promising future. Owing to the major weaknesses of LMS that are more critical apart from just being underutilised, LMS should not be the exclusive mode of e-learning applied in higher education; conversely, it is worth to ponder upon the adoption of WBI developed via an adaptable web 2.0 platform to be the future e-learning mode in instructional practices in ELT.

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