

Writing Web Logs in the ESL Classroom: A Study of Student Perceptions and the Technology Acceptance Model

Mah Boon Yih

Er Ann Nah

Universiti Teknologi MARA (UiTM), Malaysia

ABSTRACT

The web log is an exceptionally valuable tool for the teaching of second language writing, particularly written communication skills (Johnson, 2004; Wu, 2005). More and more international educators have applied this easy-to-use technology to classroom instruction and language learning (Campbell, 2003; Johnson, 2004). However, what is largely unknown is Malaysian students' reaction to writing web logs in English as a Second Language (ESL) classrooms. Therefore, this study aims to investigate the perception of writing web logs among Universiti Teknologi MARA (UiTM) HM115 diploma students who took the BEL311 English course in their third semester based on the three Technology Acceptance Model (TAM) variables. Specifically, the study sought to identify whether the two TAM determinants, Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), affected the students' behavioural intention (BI) to use web logs for specific writing tasks. This study employed Davis's TAM (1989) and its questionnaire-based measurement instrument and three hypotheses were formulated based on the objectives of the study. The pilot test's result confirmed the reliability of the modified TAM-based questionnaire. The findings showed that students accept writing web logs as a classroom activity since they perceived online journals to be more useful rather than easy to use.

Additionally, the findings revealed that TAM can be used to diagnose and interpret the attitude of new technology users and most importantly, PEOU, PU, and BI were positively and highly correlated at a significant level. These results did not reject the three proposed hypotheses.

Keywords: *web log, Technology Acceptance Model (TAM), Perceived Ease of Use (PEOU), Perceived Usefulness (PU)*

Introduction

In recent years, the use of electronic journals in education has been on the rise, especially in the United States (Johnson, 2004). More and more foreign educators have applied this user-friendly technology to classroom instruction and language learning (Campbell, 2003; Johnson, 2004). According to Kennedy (2003), publishing student writing has gained widespread adoption in middle and high school English classes. Although not originally intended for use in education, web logs have an important impact on education (Schroeder, 2003) and possess immense potential as a valuable tool for the teaching of second language writing, especially in written communication skills (Johnson, 2004; Wu, 2005). According to Lever-Duffy, McDonald and Mizell (2005), web logs have been used successfully to give students an opportunity to publicly post daily journal entries.

Problem Statement

The Development of Education National Report Malaysia (n.d., p. 50) states that “educator attitude is another constraint to effective curriculum implementation.” It seems that most educators are not keen to exploit new methods of teaching. In a traditional classroom setting, educators feel confident and contented. However, when they are requested to teach in a computer setting, there is much fear that technical knowledge will become more primary than rhetorical knowledge. One common expression that may arise is that they will not know how to help students with computer glitches, and may experience anxiety about “losing face” in front of students (Palmquist et al., 1998). The application of new Information and Communication Technology (ICT) tools in English Language Teaching (ELT) is actually decided by the educators based on

its appropriateness in the teaching and learning context. One of the decisive factors for an educator before adopting ICT as part of the ELT materials is evaluating its acceptance among students. Since web logs are a new form of technology and users are doubtful about its successful adaptation, the attitudes and intentions of writing web logs are shaped before initiating efforts begin.

Furthermore, according to Mat Daud, Mat Daud and Abu Kassim (2005), the students' writing performance is related to anxiety as a result of their lack of writing skills. This may be due to students being generally passive learners who consider that their role is to absorb knowledge as it is presented to them in the traditional classroom. However, this issue can be overcome through the use of web logs. Activities through the World Wide Web (WWW) can potentially change the students' roles from passive observers to interactive participants in a larger context that extends well beyond the writing classroom (Helford & Lei, 2001; Report of the Web Based Commission, 2000; Tryon, 2006). Presently what remains largely unknown are students' reactions to web logs in English as a Second Language (ESL) classroom. To study whether students intend to adopt a new technology, Lee, Kozar, & Larsen (2003) claimed that Technology Acceptance Model (TAM) conceptualised *usefulness* and *ease of use* as important perceptions that must be examined.

Objectives of the Study

The objectives of this study are as follows:

1. To identify whether there is a positive and significant relationship between Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) of writing web logs in an ESL classroom;
2. To identify whether there is a positive and significant relationship between PU and Behavioural Intention (BI) to write web logs in an ESL classroom; and
3. To identify whether there is a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom.

Research Questions

The three research questions addressed in the study are as follows:

- RQ1. Is there a positive and significant relationship between PEOU and PU of writing web logs in an ESL classroom?

- RQ2. Is there a positive and significant relationship between PU and BI to write web logs in an ESL classroom?
- RQ3. Is there a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom?

Literature Review

Computer-Mediated Communication Application

Computer-Mediated Communication (CMC) encompasses all computer technologies that facilitate or enable communication between two or more people using social software (Information Technology Services, 2006). Levy (2006) stated that under the umbrella of CMC, modern computer tools include application programs and communication tools. Under its broad heading, the mechanism for interaction includes email, bulletin boards and discussion lists, Instant Messaging (IM), Internet Relay Chat (IRC), and computer conferencing systems. In line with the development of new technology, the situation is rapidly developing with the latest form of technology, the web log, a popular form of CMC (Huffaker, 2005; University of Minnesota, 2006). Web logs have gained fame since they enable writers to become publishers of their own works.

In general, web logs are CMC tools that serve as a means to transmit messages. Specifically, they serve many purposes from online newsletters to personal journals to “rating and raving” (TechEncyclopedia, n.d.). Thus, the first thing about web logging is that the blogger must have something to express (Schultz, 2005). As stated by Jensen (2003), people can post anything from daily minutiae to manifestoes to sophisticated political and cultural commentary. However, according to Jensen (2003), the explosion of web logging tools is because “people like to peek into others’ lives. Reading a web log provides a voyeuristic thrill of flipping through someone’s journal, no matter how mundane the content” (para. 5). According to Huffaker (2005), these characteristics of web logs have created an excellent CMC context for individual expression.

In recent years, the link between CMC and education (Jones, 1995) is due to schools now having accessibility to the Internet. According to Thurlow, Lengel and Tomic (2004), studying and using CMC means that the process of learning is shifting across many different disciplines. In higher education, the effectiveness of CMC is apparent since successive generations of incoming students are increasingly technology savvy (Information Technology Services, 2006). In addition, Jolliffe, Ritter and

Stevens (2001) claim that CMC is an important component of web-based learning that allows for both communication and collaborative learning and, in turn, a deeper processing of information and a sense of learning community. Thus, the Internet has the elements of effective learning in that it is active and individually-tailored, involves others where specialized strategies are required and is contextualized (Ryder & Hughes, 1997).

Web Log—the Newest of CMC Application

The web log, the latest technology in CMC, is commonly known as a blog. The word *blog*, a contraction of the coined word *Weblog* or *Web log* (Internet Marketing Reference, n.d.; Risdahl, 2006), is both a noun and a verb (Bartlett-Bragg, 2003). The term *Weblog* was first coined in December 1997 by John Barger (www.robotwiSDom.com/) referring to a web page containing a list or *log* with links to other web pages that the blogger found interesting (Martindale, & Wiley, 2005; McBride & Cason, 2006; Risdahl, 2006). Blog was declared by Merriam-Webster to be the word of the year in 2004 before it became the buzzword for 2004 (Lindroth, 2006). The rise in popularity has resulted in new words being added to the English language, such as: *blog*, *blogging*, *bloggers*, and *blogosphere* (Ross, 2002). Web log has been defined as “a website that contains dated text entries in reverse chronological order (most recent first) about a particular topic” (TechEncyclopedia, n.d., para. 1). Furthermore, it has been defined as “a web publishing program that is specifically designed to enable an individual to publish a daily commentary” (Webster’s New World™ Computer Dictionary, 2003, para. 1).

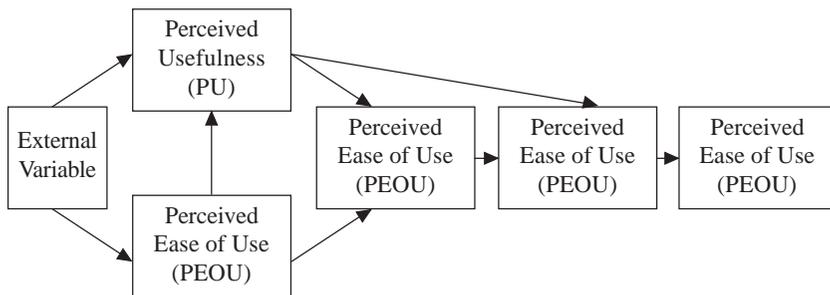
Web log is arguably the first form native to the web (Blood, 2003) that allows the *blogger*, a person who writes web logs (TechEncyclopedia, n.d.), to create online journals and keep records of his or her writing on a website without the need of any programming experience or Hypertext Mark-up Language (HTML) knowledge (Bartlett-Bragg, 2003). This makes it simple for almost anyone to publish his or her work to a worldwide forum (Wells, 2006). According to McBride & Cason (2006), there were no recognised web logs in 1996. However, web logs have actually existed since the early days of the Internet (Jensen, 2003). In July 1999, a programmer named Andrew Smales in Toronto launched Pitas.com, the first do-it-yourself web log tool. In the same year, Pitas.com, GrokSoup, and Pyra were released as the first online web log-publishing tools helping people to build web logs, eventually changing its name to *Blogger.com* (Risdahl, 2006; TechEncyclopedia, n.d.). *Blogger.com* was launched in

August 1999 by Evan Williams, Paul Bausch, and Meg Hourihan and has become the largest and best-known of its kind (Jensen, 2003).

Generally, there are two components to web logs, the software that runs on a web server and generates the pages of a web log and the posting tool that sends comments to the software. Most services like *Blogger.com* let the user post contents through a web form, so that updating the site is easily done from any computer with Internet access. However, the drawback is that some web forms are less than ideal for editing text and this has caused some developers to come up with the desktop software (Hacker, 2003). Later when web experts like Justin Hall and Adam Greenfield used *Moblog* or *MoBlog* for the first time, a contraction of mobile web log, it symbolized a further dimension in the development of web logs. In 2003, the first International Moblogging Conference (IIMC) in Tokyo was organised (Döring & Gundolf, 2006). The only difference between moblogs and web logs is the ability to upload by using mobile technology.

Conceptual Framework: Technology Acceptance Model

TAM was originally proposed by Fred Davis in 1989 as one of the most influential extensions of Ajzen and Fishbein’s Theory of Reasoned Action (see Figure 1). Developed by Fred Davis and Richard Bagozzi (Davis, 1989), it models how users come to accept and use a technology. According to Landry et al. (2006, p. 89), TAM can be interpreted as “ones behaviour and the intent to behave is a function of one’s attitude toward the behaviour and their perceptions about the behaviour”. The



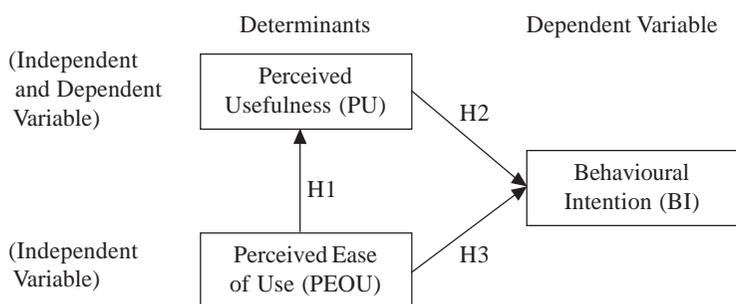
Source: Davis et al. (1989)

Figure 1: Original Davis’s Technology Acceptance Model (TAM)

model proposes that when users are presented with a new system, technology or software package, a number of factors affect their decision about how and when they will use it. TRA and TAM, both of which have strong behavioural elements, assume that when someone forms an intention to act, they will be free to act without limitation. Figure 1 shows the original TAM proposed by Fred Davis.

The goal of this model is to provide an explanation of the determinants of technology acceptance. TAM replaces many of TRA’s attitude measures with the two technology acceptance determinants – *Perceived Ease of Use* and *Perceived Usefulness* and assumes that an individual’s information systems acceptance is determined by these two major variables. Davis defined PEOU as “the degree to which a person believes that using a particular system would be free from effort” (Davis, 1989, p. 320). PU was defined by Fred Davis as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 320). Behavioural intention is a measure of the strength of one’s intention to perform a specified behaviour (Gardner & Amoroso, 2004). Based on the original TAM in Figure 1, the conceptual framework of the study is formed and depicted in Figure 2.

Based on the conceptual framework in Figure 2, BI is determined by PEOU and PU (BI = PEOU + PU) (Venkatesh, 1999). Davis et al. (1989) had claimed that BI may be based on its anticipated impact on work performance regardless of the individual’s overall attitude toward that system. In other words, attitude may not be an important determinant of intention and usage in a workplace setting taking into account the usefulness factor. For this reason and to keep the model as simple as



Note:

H Hypothesis

Figure 2: Conceptual Framework of the Study Based on the TAM

possible, the variable “attitude toward using” was not employed in the conceptual framework. According to Lee et al. (2003), the four major variables of TAM are PEOU, PU, Behavioural Intention (BI), and Behaviour (B). As noted by Davis et al. (1989) and Taylor and Todd (1995b), BI is the major determinant of actual system use postulated by TAM. B is a direct function of BI (Taylor & Todd, 1995a) and BI was said to have a direct effect on user acceptance (Wagner & Flannery, 2004). Horton, et al., (2001) also stated that TAM may not be useful for explaining actual system usage. Since literature had consistently shown that BI is the strongest predictor of actual system use, “actual system use” was excluded in the framework.

Based on the conceptual framework used in the study, three hypotheses were formulated as follows:

- H1. There is a positive and significant relationship between PEOU and PU of writing web logs in an ESL classroom.
- H2. There is a positive and significant relationship between PU and BI to write web logs in an ESL classroom.
- H3. There is a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom.

TAM has been widely used in the IS research to gather user reactions to information systems (Landry et al., 2006). Lee et al. (2003) noted that:

Of all the theories, the Technology Acceptance Model (TAM) is considered the most influential and commonly employed theory for describing an individual's acceptance of information systems. (p. 752)

Further supporting the notion of TAM's popularity, Lee et al. (2003) had found 698 journal citations of TAM by 2003 where its robustness in application had been extended to different technologies with different control factors and different subjects. According to Sarriera, Qayyum, and Nieves (n.d.), there are 424 citations of TAM in the original articles based on the Institute of Scientific Information's Social Science Citation Index, which proves that TAM is a well-established, powerful and parsimonious model for predicting user acceptance. Many researchers such as Adams et al. (1992), Hendrickson, Massey and Cronan (1993) and Szajna (1994) have replicated Davis's original study (Davis et al. 1989). Adam et al. (1992) found the measurement for PU and PEOU in diverse settings and different information systems to be both valid and

reliable. Hendrickson et al. (1993) found Davis's instrument to be reliable and valid through test-retest analysis. Szajna (1994) revealed that Davis's instrument possessed high predictive validity for intention to use, self-reported usage, and attitude toward use. To conclude, TAM has been investigated extensively and found to be powerful, consistent, reliable and valid (Lee et al., 2003).

Methodology

Population and Sample

The population of subjects in the study consisted of 918 UiTM third semester diploma students who were taking the BEL311 course offered by the Academy of Language Studies (APB). The study employed the cluster sampling method, a common application used with intact classrooms as clusters, where all members from the selected clusters or groups were involved in the study (Ary et al., 2002; Parmjit, Chan, & Gurnam, 2006). To ensure the availability of the minimum number of respondents ($n = 30$) for a sample, a group of third semester diploma students ($n = 37$) was chosen randomly to participate in the pilot test. Since the study was based on correlational research, a moderate sample size ($n = 50$ to 100) as recommended by Ary et al. (2002) was used. Hence, all third semester HM115 diploma students who had registered for BEL 311 course ($n = 58$) were selected as the target sample.

Instrumentation

The study used a modified version of the TAM-based questionnaire adapted from Gardner and Amoroso (2004), Laitenberger and Dreyer (1998) and Malhotra and Galletta (1999). TAM is an established model of computer usage and its scales of measurement have been validated through a number of technologies (Adams et al., 1992; Davis et al., 1989, Gardner & Amoroso, 2004; Hendrickson et al., 1993; Landry et al., 2006; Ma, Andersson & Streith, 2005; Szajna, 1994). By making use of the three TAM major variables (PEOU, PU, and BI), a questionnaire with 15 items, five items on each variable, was given to the respondents in the pilot test.

A classical measure of reliability, Cronbach alpha (α), was used to measure the internal consistency reliability for the items within each

variable. After confirming the reliability of the TAM based questionnaire, it was administered in the actual study. PEOU, PU, and BI were measured by five items respectively (see Table 1, Table 2, and Table 3). All the items used a 7-point Likert scale that is widely used to measure the strength of an attitude or an opinion (Ary et al. 2002; Parmjit et al., 2006). According to Brown and Rodgers (2002), a Likert scale is generally useful for getting respondents' judgements or opinions about almost any aspect of language learning.

Table 1: Items of Perceived Ease of Use (PEOU) Determinant

No.	PEOU items
1.	Learning to use web logs in journal writing is easy for me.
2.	I find it easy to get web logs to do what I want it to do in journal writing.
3.	I do not face problems in interacting with web logs for journal writing.
4.	I find web logs flexible enough to interact with journal writing.
5.	It is easy for me to become skilful at using web logs for journal writing.

Table 2: Items of Perceived Usefulness (PU) Determinant

No.	PU Items
1.	Using web logs can improve my journal writing performance.
2.	Using web logs can make it easier for me to do journal writing.
3.	Using web logs for journal writing can increase my productivity.
4.	Using web logs can improve the quality of journal writing.
5.	I find web logs useful in journal writing.

Table 3 : Items of Behavioural Intention (BI) Variable

No.	BI Items
1.	I always try to use web logs to do journal writing whenever it has a feature to help me write the journal.
2.	I always try to use web logs in journal writing on as many occasions as possible.
3.	I plan to use web logs for journal writing in the future.
4.	I intend to continue using web logs for journal writing in the future.
5.	I expect my use of web logs for journal writing to continue in the future.

Data Collection Procedures

During the first class, respondents were informed about the objectives and procedures of the study. Then, a consent form adapted from Melbourne Research Office – Human Ethics, The University of Melbourne (2006) was given to each student to be signed in order to fulfil the ethical requirements of the study. Later, respondents were provided with a writing task together with detailed handouts that demonstrate a step-by-step procedure of using *Blogger.com* to create an individual web log. A simple and brief explanation about the writing task was given to the respondents. They were provided with almost no guidance about blogging so as to allow them to figure it out on their own in order to prevent prescriptive instruction and restriction of use. They were given one week to complete the task.

In the last lesson when the respondents had finished the writing task, the questionnaire was administered. The respondents were given the same 15-item questionnaire to rate the actual usefulness, ease of use and behavioural intention in writing web logs. They were asked to recall and think about the blogging activities they had performed. They needed to circle one of the seven numbers arranged from strongly agree to strongly disagree. A score was assigned to each response and the scores belonging to a particular variable were summed up, so that respondents with the most favourable perceptions would have the highest score while the lowest score would belong to the respondents with the least favourable perceptions. Lastly, they were given a form to register their names, web log titles, web log addresses, and dates of their published work to ensure that they had completed the tasks.

After administering the pilot test and questionnaire, a reliability analysis was conducted. Cronbach's alpha or coefficient alpha (α) was computed as the index of reliability that indicates how well the items in a variable set are positively correlated to one another (Sekaran, 2003). It was also used because the TAM items use attitude scales that are not scored simply as right or wrong (Ary et al., 2002). According to Coakes (2005), it is one of the most commonly used reliability coefficients for homogeneity measurement as well as consistency and stability testing. Thus, the α value will determine which items should be eliminated to increase the reliability of the instrument. The closer α is to 1, the higher is the internal consistency reliability.

Before collecting the real data, the materials, research tools, and procedures were pilot-tested. The pilot groups consisted of one group of

UiTM third semester diploma students who registered for the BEL311 course ($n = 32$) but were not part of the sample. The values of α for the TAM variables were obtained from the pilot test as shown in Table 4. PEOU consisted of 5 items and achieved $\alpha = .907$ while PU consisted of 5 items and yielded $\alpha = 0.956$. Besides, BI consisted of 5 items and reached $\alpha = 0.919$. Reliabilities less than .60 are considered to be poor; those in the .70 range are acceptable; and those over 0.8 are good in most Social Science research situations (Sekaran, 2003; Tuckman, 1972; UCLA Academic Technology Services, n.d.). Since all the internal consistency indexes of PEOU, PU, and BI are more than 0.8, which is considered good, all items from each construct were maintained.

Table 4: Reliability Coefficients for the Major Variables

Variable	Number of items	Cronbach's alpha (α)
Perceived Ease Of Use (PEOU)	5	.907
Perceived Usefulness (PU)	5	.956
Behavioural Intention (BI)	5	.919

Data Analysis and Findings

Hypothesis Testing

The correlation coefficients between PEOU, PU, and BI in the questionnaire are indicated in Table 5. In the questionnaire, the relationship between PEOU and PU was explored using Pearson product moment correlation. There was a high positive and significant correlation ($r = 0.829$, $p < .01$) between PEOU and PU. This result suggests that a real association exists between the two variables, PEOU and PU of writing web logs in an ESL classroom. As shown in Table 5, PU is positively and significantly correlated with BI ($r = 0.834$, $p < .01$). The high association between PU and BI suggests that the respondents had discovered the usefulness of writing web logs and this directly influenced their intention to use them. There is a strong positive and significant correlation between PEOU and BI ($r = 0.825$, $p < .01$). The result shows that the respondents believed that writing web logs was easy and this directly influenced their intention to use them and the genuine relationship between PEOU and BI was strengthened.

Table 5: Correlation between PEOU, PU, and BI in the Questionnaires

Hypotheses	Correlation coefficient (r)
There is a positive and significant relationship between Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) of writing web logs in an ESL classroom.	.829**
There is a positive and significant relationship between Perceived Usefulness (PU) and Behavioural Intention (BI) to write web logs in an ESL classroom.	.834**
There is a positive and significant relationship between Perceived Ease of Use (PEOU) and Behavioural Intention (BI) to write web logs in an ESL classroom.	.825**

Note: *p < .05, **p < .01 (1-tailed)

- H1. There is a positive and significant relationship between PEOU and PU of writing web logs in an ESL classroom.
- H2. There is a positive and significant relationship between PU and BI to write web logs in an ESL classroom.
- H3. There is a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom.

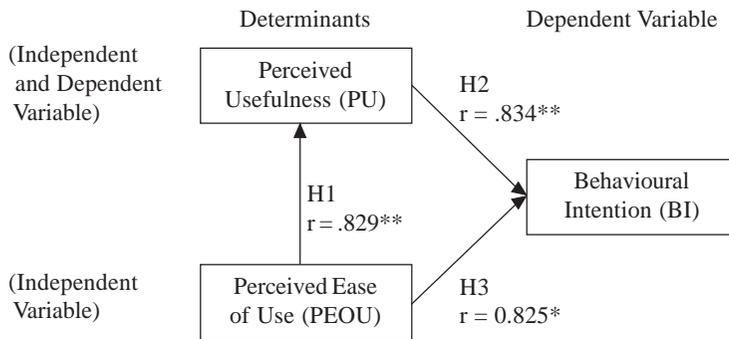
Hypothesis 1

There is a positive and significant relationship between PEOU and PU of writing web logs in an ESL classroom.

Figure 3 displays the results obtained from Table 5 regarding the correlation between PEOU, PU, and BI in the questionnaire. Apparently, there is a high positive relationship between PEOU and PU in the questionnaire. According to Holmes et al. (2005), the relationship between PEOU and PU in the post-questionnaire is considered high. This is further supported by Creswell (2005) that correlation in this range would be considered very good and a good prediction can result from one variable to the other. As pointed out by Lee et al. (2003), PEOU is a significant antecedent of PU where PU is predicted by PEOU.

In addition, from the TAM theoretical perspective, PEOU influences PU but it does not hold for converse relationship (PU influence PEOU) (Dillon & Morris, 1996). For example, it was claimed that *Blogger.com* was extremely easy to use (Krause, n.d.) and free because setting up a

web log takes only less than five minutes (Kajder & Bull, 2003). According to Oravec (2002), it has been described as “Push-Button Publishing for the People” and he declares “Blogger offers you instant communication power by letting you post your thoughts to the web whenever the urge strikes” (p. 2). Thus, it is known as one of the most reliable and useful blogging tools for students (Stanley, 2005) and many educators and students favour having their web logs hosted there (Oravec, 2002). Since a positive and significant relationship exists between PEOU and PU, the first hypothesis was not rejected – *There is a positive and significant relationship between PEOU and PU of writing web logs in an ESL classroom.*



Note:

H Hypothesis

r Pearson product moment correlation coefficient

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

Figure 3: Results of Hypothesis Testing

Hypothesis 2

There is a positive and significant relationship between PU and BI to write web logs in an ESL classroom.

Figure 3 depicts the high positive relationship between PU and BI based on Table 5. PU is treated both as a dependent and independent variable because it is predicted by PEOU and it predicts BI at the same time. If compared to the relationship between PEOU and BI, the association between PU and BI is stronger. This shows that PU was the stronger predictor of behavioural intention to use a newly implemented technology, which is supported by Eagly and Chaiken (1993), Fazio and Zanna (1978), Regan and Fazio (1977), as cited in Taylor and Todd (1995a).

Based on the results, usefulness was more strongly linked to behavioural intention rather than ease of use. The result corresponds with the claims of Lee et al. (2003) that PU was a stronger determinant of BI compared to PEOU because users willingly use the technology that has a critically useful functionality. Web logs provide individuals with their own virtual online web spaces which enable bloggers to post their personal views or commentaries on any topic. Others may respond to these ideas by using the links and comments, either in comments to the posting or in other web logs with a link back to the original posting (Lever-Duffy et al., 2005). Besides, links can be added in their own commentaries to connect to other web resources or backtrack to other web logs. Bloggers also can post commentaries about other web logs on their own web logs (Lever-Duffy et al., 2005). Based on the positive and significant relationship existing between PU and BI, the second hypothesis was not rejected – *There is a positive and significant relationship between PU and BI to write web logs in an ESL classroom.*

Hypothesis 3

There is a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom.

Based on Figure 3, PEOU was positively and significantly correlated with BI. This shows that PEOU is a secondary determinant of intention to use a technology, which corresponds to the study of Davis (1989) and Davis and Bostrom (1993) since the relationship between PEOU and BI is largely mediated by PU. Taylor and Todd (1995a) also added that inexperienced users may have a stronger perceived ease of use attitude while a perceived usefulness attitude will be stronger for experienced users. The rationale is that inexperienced users may focus primarily on PEOU while experienced users have most probably overcome concerns about PEOU and may focus on PU. These claims concur with the findings of this study where the users had a weaker PEOU and BI relationship compared to PU and BI relationship after completing the writing task.

Moreover, the lack of ease of use for users may be due to computer access difficulties, hardware disabilities, program failure, “server down” and low Internet connection. Lee et al. (2003) also added that PEOU is an unstable measure in predicting BI. Adams et al. (1992) also claimed PEOU was less important overall in determining use or behaviour but

PEOU might influence the initial decision to adopt a system. According to Wolski and Jackson (1999) and Hackbarth, Grover and Yi. (2003), PEOU played a critical role in predicting and determining a user's technology acceptance behaviour. However, the result obtained by Agarwal and Prasad (1999) indicated that PU and PEOU had a roughly equivalent influence on BI. Hence, based on the positive and significant relationship found between PEOU and BI, the third hypothesis was not rejected – *There is a positive and significant relationship between PEOU and BI to write web logs in an ESL classroom.*

Conclusion

This study has therefore validated the three proposed hypotheses. There are positive and significant relationships between PEOU, PU, and BI in web log users. The modified PEOU, PU and BI items were found to have strong psychometric properties in the study. Based on the subjects' responses in the study, web logs were perceived to be more useful rather than easy to use in an ESL classroom. The study therefore strongly supports the practice of using web logs in ESL classroom. In addition, the study found that the UiTM HM115 diploma students taking BEL311 English course in the third semester perceived the usefulness of writing web logs, which directly and significantly influenced their intention to write web logs. It showed that students' perceived ease of use was fully mediated by their perceived usefulness, which had considerable indirect effects on their intention to write web logs. Furthermore, sustained by previous empirical studies, the TAM questionnaire based instrument has proven to be a reliable tool not only for Information systems (IS) but also in educational contexts that discriminated the perceived ease of use and perceived usefulness as two key factors to behaviour acceptance.

The acceptance of writing web logs in an ESL classroom as examined in this study can be an imperative foundation to promote a variety of CMC applications in English Language Teaching (ELT). Therefore, this study has shown a preliminary finding about how far UiTM HM115 diploma students favoured using the online method instead of paper and pen to do writing tasks. With well organised instructional design efforts, web logs can be implemented in classrooms to replace traditional "chalk-and-talk" activities since writing web logs was found indeed useful and easy-to-use. This study has also highlighted that it is essential to verify students' acceptance of the new technology with the learning objectives

and process when bringing a new technology into ESL classrooms. By utilising TAM, more extensive studies can be conducted to predict or evaluate the use of web logs as a medium for different language skills. Finally, educators should be reminded that the objective of ICT implementation is to teach writing, not blogging.

References

- Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS Quarterly*, 16(2), 227–247. Retrieved February 21, 2007, from the Business Source Premier database.
- Agarwal, R., & Prasad, J. (1999). Are individual differences germane to the acceptance of new information technologies? *Decision Science*. Retrieved April 24, 2007, from http://findarticles.com/p/articles/mi_qa3713/is_199904/ai_n8844238/print
- Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education* (6th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Bartlett-Bragg, A. (2003). Web logging to learn. *The Knowledge Tree*. Retrieved February 2, 2007, from http://knowledgetree.flexiblelearning.net.au/edition04/pdf/Web_logging_to_Learn.pdf
- Blood, R. (2003). Web logs and journalism: Do they connect? *Nieman Reports*, 57(3), 61–63. Retrieved January 21, 2007, from the Communication & Mass Media Complete database.
- Brown, J. D., & Rodgers, T. S. (2002). *Doing second language research*. n.p.: Oxford University Press.
- Campbell, A. P. (2003). Web logs for use with ESL classes. *The Internet TESL Journal*, IX(2). Retrieved January 9, 2007, from http://iteslj.org/Techniques/Campbell-Web_logs.html
- Coakes, S. J. (2005). *SPSS: Analysis without anguish: Version 12.0 for Windows*. Milton: Wiley.

- Creswell, J. W. (2005). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). New Jersey: Pearson Education.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. Retrieved February 21, 2007, from the Academic Search Premier database.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003. Retrieved February 21, 2007, from the Business Source Premier database.
- Davis, S. A., & Bostrom, R. (1993). Training end users: An experimental investigation of the roles of the computer interface and training methods. *MIS Quarterly*, 17(1), 61–80. Retrieved April 24, 2007, from the Business Source Premier database.
- Development of Education National Report Malaysia*. (n.d.). Retrieved February 3, 2007, from <http://www.ibe.unesco.org/International/ICE/natrap/Malaysia.pdf>
- Dillon, A., & Morris, M.G. (1996). User acceptance of new information technology: Theories and models. *In Annual Review of Information Science and Technology*, 31, 3–32. Retrieved April 21, 2007, from the dLIST database.
- Döring, N., & Gundolf, A. (2006). Your life in snapshots: Mobile Web logs. *Knowledge, Technology & Policy*, 19(1), 81–90. Retrieved January 21, 2007, from the Academic Search Premier database.
- Gardner, C., & Amoroso, D. L. (2004). Development of an instrument to measure the acceptance of Internet technology by consumers. *Proceedings of the 37th Hawaii International Conference on System Science*. Retrieved February 21, 2007, from the IEEE Xplore database.
- Hackbarth, G., Grover, V., & Yi, M. Y. (2003). Computer playfulness and anxiety: Positive and negative mediators of the system experience effect on perceived ease of use. *Information and Management*,

- 40(3), 221–232. Retrieved April 23, 2007, from <http://sample.ctust.edu.tw/%E6%9D%8E%E6%A1%82%E6%98%A5/Mispaper/infor&manag/03042817035913751.pdf>
- Hacker, S. (2003). Put Web logs to work. *Macworld*, 20(7), 76. Retrieved January 21, 2007, from the Academic Search Premier database.
- Helford, P.Q., & Lei, R.M. (2001). *Using the Web to deliver and enhance classes: Two case studies*. Retrieved February 24, 2007, from <http://www.tkk.fi/events/eunis99/Assession/A31.html>
- Hendrickson, A. R., Massey, P. D., & Cronan, T. P. (1993). On the test-retest reliability of perceived usefulness and perceived ease of use scales. *MIS Quarterly*, 17(2), 227–230. Retrieved February 21, 2007, from the Academic Search Premier database.
- Holmes, R., Dahan, H. M., & Ashari, H. (2005). *A guide to research in the social sciences*. Selangor: Prentice Hall, Pearson Malaysia.
- Horton, R. P., Buck, T., Waterson, P. E., & Clegg, C. W. (2001). Explaining intranet use with the technology acceptance model. *Journal of Information Technology (Routledge, Ltd.)*, 16(4), 237. Retrieved February 21, 2007, from the Academic Search Premier database.
- Huffaker, D. (2005). The educated Blogger: Using Web logs to promote literacy in the classroom. *AACE Journal*, 13(2), 91–98. Retrieved January 16, 2007, from http://www.editlib.org/index.cfm/files/paper_5680.pdf?fuseaction=Reader.DownloadFullText&paper_id=5680
- Information Technology Services. (2006). *Computer mediated communication*. Retrieved April 24, 2007, from Hobart and William Smith Colleges Web site: http://www.hws.edu/administration/itservices/solutions_cmc.asp
- Internet Marketing Reference. (n.d.). *Web log*. Retrieved January 16, 2007, from http://www.marketingterms.com/dictionary/web_log/
- Jensen, M. (2003). A brief history of Web logs. *Columbia Journalism Review*, 42(3), 22–22. Retrieved January 21, 2007, from the Communication & Mass Media Complete database.

- Johnson, A. (2004). Creating a writing course utilizing class and student web logs. *The Internet TESL Journal*, X(8). Retrieved January 9, 2007, from http://iteslj.org/Techniques/Johnson-Web_logs/
- Jolliffe, A., Ritter, J., & Stevens, D. (2001). *The online learning handbook: Developing and using web-based learning*. London: Kogan Page.
- Jones, S. G. (1995). *Cybersociety: Computer-mediated communication and community*. Thousand Oaks: SAGE.
- Kajder, S., & Bull, G. (2003). Scaffolding for struggling students: Reading and writing with web logs. (Mining the Internet). *Learning & Leading with Technology*, 31, 32–35. Retrieved January 2, 2007, from InfoTrac OneFile database via Thomson Gale.
- Kennedy, K. (2003) *Writing with web logs*. Retrieved March 5, 2007, from http://www.techlearning.com/db_area/archives/TL/2003/02/web_logs.php
- Krause, S. D. (n.d.). *When web logging goes bad: A cautionary tale about web logs, email lists, discussion, and interaction (1)*. Retrieved January 9, 2007, from http://english.ttu.edu/KAIROS/9.1/praxis/krause/index.html#writing_educators
- Laitenberger, O., & Dreyer, H. M. (1998). Evaluating the usefulness and the ease of use of a web-based inspection data collection tool. *Proceedings of the Fifth International Symposium on the Software Metrics*. Retrieved February 21, 2007, from the IEEE Xplore database.
- Landry, B. J. L., Griffeth, R., & Hartman, S. (2006). Measuring student perceptions of blackboard using the technology acceptance model. *Decision Science Journal of Innovative Education*, 4(1), 87–99. Retrieved February 24, 2007, from Blackwell Synergy database.
- Lee, Y., Kozar, K. A., & Larsen, K. R. T. (2003). The technology acceptance model: Past, present, and future. *Communications of AIS*, 2003(12), 752–780. Retrieved April 24, 2007, from the Business Source Premier database.

- Lever-Duffy, J., McDonald, J. B., & Mizell, A. P. (2005). *Teaching and learning with technology* (2nd ed.). Boston: Pearson.
- Levy, Y. (2006). *Assessing the value of e-learning systems*. Hershey: Information Science.
- Lindroth, L. (2006). How to ...web log! *Teaching PreK-8*, 37(1), 25–26. Retrieved January 21, 2007, from the Academic Search Premier database.
- Ma, W. W., Andersson, R., & Streith, K. (2005). Examining user acceptance of computer technology: An empirical study of student educators. *Journal of Computer Assisted Learning*, 21(6), 387–395. Retrieved April 25, 2007, from the Academic Search Premier database.
- Malhotra, Y., & Galletta, D. F. (1999). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation. *Proceedings of the 32nd Annual Hawaii International Conference on System Sciences*. Retrieved February 21, 2007, from the IEEE Xplore database.
- Martindale, T., & Wiley, D. A. (2005). Using Web logs in scholarship and teaching. *TechTrends Linking Research and Practice to Improve Learning*, 49(2), 55–61. Retrieved January 16, 2007, from the ERIC database.
- Mat Daud, N. S., Mat Daud, N., & Abu Kassim, N. L. (2005). Second language writing anxiety: Cause or effect? *Malaysian Journal of ELT Research, Inaugural*. Retrieved July 20, 2006, from http://www.melta.org.my/Doc/second_lang_writing_anxiety.pdf
- McBride, N., & Cason, J. (2006). *Teach yourself web logging*. United Kingdom: Hodder Education.
- Melbourne Research Office – Human Ethics, The University of Melbourne. (2006, November 12). *Consent guidelines/Sample consent forms*. Retrieved February 24, 2007, from <http://www.research.unimelb.edu.au/humanethics/processes/applicprocedure/consent/#sample>

- Oravec, J. A. (2002). Bookmarking the world: Web log applications in education. *Journal of Adolescent & Adult Literacy*, 45(7), 616–621. Retrieved January 21, 2007, from the Academic Search Premier database.
- Palmquist, M., Kiefer, K., Hartvigsen, & Goodlew, B. (1998). *Transitions: Teaching writing in computer-supported and traditional classrooms*. Greenwich: Ablex.
- Parmjit, S., Chan, Y. F., & Gurnam, K. S. (2006). *A comprehensive guide to writing a research proposal*. Batu Caves: Venton Publishing.
- Report of the Web Based Commission. (2000). *The power of the Internet for learning*. Retrieved February 24, 2007, from <http://www.hpcnet.org/upload/wbec/reports/WBECReport.pdf>
- Risdahl, A. S. (2006). *The everything web logging book*. Avon, MA: Adams Media.
- Ross, T. (2002). You web log, we web log: A guide to how educator-librarians can use Web logs to build communication and research skills. *Educator Librarian*, 30(2), 7. Retrieved January 16, 2007, from the Academic Search Premier database.
- Ryder, R. J., & Hughes, T. (1997). *Internet for educators*. New Jersey: Prentice-Hall.
- Sarriera, H. J. F., Qayyum, A., & Nieves, O. V. (n.d.). *Comparing two approaches in computer training workshops: A study on technology acceptance*. Retrieved April 24, 2007, from University of Puerto Rico Web site: <http://cmcep.uprrp.edu/fipi2006.pdf>
- Schroeder, R. (2003). One path to the web log: An odyssey in tracking and sharing technology with the online higher education community. *eLearn*, 2003(6). Retrieved January 30, 2007, from the ACM Digital Library database.
- Schultz, B. (2005). Web logs: Getting started. *Business Communication Quarterly*, 68(1), 67–73. Retrieved January 21, 2007, from the Business Source Premier database.

- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New York: John Wiley & Sons
- Stanley, G. (2005). Web logging for ELT. *British Council Teaching English*. Retrieved February 1, 2007, from http://www.teachingenglish.org.uk/think/resources/web_logging.shtml
- Szajna, B. (1994). Software evaluation and choice: Predictive validation of the technology acceptance instrument. *MIS Quarterly*, 18(3), 319–324. Retrieved April 24, 2007, from the Business Source Premier database.
- Taylor, S., & Todd, P. (1995a). Assessing IT usage: The role of prior experience. *MIS Quarterly*, 19(4), 561–570. Retrieved April 24, 2007, from the Business Source Premier database.
- Taylor, S., & Todd, P. (1995b). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6(2), 144–176. Retrieved April 20, 2007, from the Business Source Premier database.
- TechEncyclopedia. (n.d.). *Web log*. Retrieved January 16, 2007, from [http://www.techweb.com/encyclopedia/shared/printArticlePageSrc.jhtml?term=web log](http://www.techweb.com/encyclopedia/shared/printArticlePageSrc.jhtml?term=web%20log)
- TechEncyclopedia. (n.d.). *Blogger*. Retrieved January 16, 2007, from <http://www.techweb.com/encyclopedia/shared/printArticlePageSrc.jhtml?term=Blogger>
- TechEncyclopedia. (n.d.). *Web logging*. Retrieved January 16, 2007, from [http://www.techweb.com/encyclopedia/shared/printArticlePageSrc.jhtml?term= web logging](http://www.techweb.com/encyclopedia/shared/printArticlePageSrc.jhtml?term=web%20logging)
- Thurlow, C., Lengel, L., & Tomic, A. (2004). *Computer mediated communication: Social interaction and the Internet*. London: SAGE.
- Tryon, C. (2006). Writing and citizenship: Using web logs to teach first-year composition. *Pedagogy*, 6(1), 128–132. Retrieved January 16, 2007, from the Academic Search Premier database.

- Tuckman, B. W. (1972). *Conducting educational research*. United States of America: Harcourt Brace Jovanovich.
- UCLA Academic Technology Services (n.d.). *SPSS FAQ: What does Cronbach's alpha mean?* Retrieved April 20, 2007, from <http://www.ats.ucla.edu/STAT/SPSS/faq/alpha.html>
- University of Minnesota. (2006). *Web logs (Web logs)*. Retrieved February 29, 2007, from <http://www1.umn.edu/ohr/teachlearn/tutorials/syllabus/technology/communication.html>
- Venkatesh, V. (1999). Creation of favorable user perceptions: Exploring the role of intrinsic motivation. *MIS Quarterly*, 23(2), 239–260. Retrieved April 24, 2007, from the Business Source Premier database.
- Wagner G. D., & Flannery D. D. (2004). A quantitative study of factors affecting learner acceptance of a computer-based training support tool. *Journal of European Industrial Training*, 28(5), 383–399. Retrieved April 24, 2007, from the EmeraldInsight database.
- Webster's New World™ Computer Dictionary. (2003). *Web log*. Retrieved January 24, 2007, from <http://www.xreferplus.com.newdc.oum.edu.my/entry/3486930>
- Wells, L. (2006). Web log it: An innovative way to improve literacy. *Reading Today*, 24(1), 40–40. Retrieved January 21, 2007, from the Academic Search Premier database.
- Wolski, S., & Jackson, S. (1999). *Technological diffusion within educational institutions: Applying the technology acceptance model*. Retrieved April 24, 2007, from the ERIC database.
- Wu, W. S. (2005, March). *Using web logs in an EFL writing class*. Retrieved February 2, 2007, from Michael Wu's (Wen-Shuenn Wu's) Publications Web site: http://www.chu.edu.tw/~wswu/publications/papers/conference_s/05.pdf