

Pre-University English as Second Language (ESL) Learners' Attitude towards Mobile Learning

Harwati Hashim, Melor Md. Yunus, Mohamed Amin Embi

Faculty of Education, National University of Malaysia, Bangi, Malaysia
Email: harwatihashim@yahoo.com

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Abstract

Despite computer technologies, mobile technologies are also seen to have proven as potential tools in increasing the learning of language. The fast growth of new generation of mobile technologies has increased the great potential of effective English language learning especially among the pre-university English as Second Language (ESL) learners. This demands the needs for higher education institutions to change over their approach to meet new technological advances and educational challenges. However, since the success of mobile learning depends upon ESL learners' acceptance of the technology, their acceptance should be a key concern for administrators and educators when are considering the implementation of mobile learning. Thus, this study investigates pre-university ESL learners' attitude towards mobile learning for the purpose of learning ESL. Data are collected from 378 semester one students from four polytechnics in Malaysia and are analysed using descriptive statistics. The findings of the study are hoped to provide polytechnic administrators a means to make effective fiscal and educational decisions regarding mobile learning and to ensure the fiscal and pedagogical success of a mobile learning initiative in a globally competitive environment.

Keywords

Mobile Learning and ESL, English as Second Language (ESL) Learning, UTAUT, Attitude towards Mobile Learning

1. Introduction

The need to improve the level of English language proficiency in Malaysia is becoming more and more important especially in education. In the [Malaysia Education Blueprint \(2013-2025\)](#), boosting all students' proficiency in

English language will be the most immediate priority. Students need to be proficient in using English language, which will equip them well for entering the workforce in a globalising world. The English language is identified as a crucial element in the effort to achieve a developed country status by the year 2020. Therefore, academicians and researchers are aggressively finding ways to improve students' English skills in reading, listening, writing and speaking. To enable Malaysia to compete at the global level, many new policies have been formulated, so that education in Malaysia is in line with the modernization that students in this country are going through (Norazah et al., 2011). This includes academicians at polytechnics in Malaysia. One of the efforts introduced by the Department of Polytechnic Education is by deploying ICT in teaching and learning English. This was also an additional initiative towards enhancing the National e-Learning Policy which is officially launched by the Minister of Higher Education Malaysia in 2012. This is in line with the vision and mission of the Critical Agenda Projects (CAP) and the National Key Result Areas (NKRA) of the Ministry of Higher Education. Innovative teaching and learning methodology are also necessary in complementing Shift 4 of *Malaysia Education Blueprint (2015-2025)* which is to produce quality Technical and Vocational Education and Training (TVET) graduates.

The use of ICT in English language learning is hoped to optimise the learning among polytechnic students. Many teachers and educators feel that the use of technology changes the dynamics of their classrooms (Hashim & Yunus, 2012a). For second language learning, the optimal learning environment includes opportunities to interact and negotiate meaning, interaction in the target language with an authentic audience, involvement in authentic tasks, exposure and encouragement to produce varied and creative language, having enough time and feedback, guide to attend mindfully to the learning process, an atmosphere with an ideal stress and anxiety level and learner autonomy is supported (Egbert, 2009). Therefore, it is important that the actions being taken are to prepare an ideal system that allows learners to experiment and takes risks in a psychologically favourable and motivating environment; offers input to both conscious and unconscious learning process; offers learners opportunities to practise; allows learners to learn according to their purposes and goals; puts learners in touch with other learners; promotes interactivity in learning and communication; exposes the learners to appropriate context for learning; expands the learners' "zone of proximal development"; and, builds to learner independence (Pennington, 2003).

At present, technology in the language classrooms has been noted for enhancement of speaking, writing, listening, and reading skills (Zurita & Nussbaum, 2004; Lindquist et al., 2007). It is shown that technology is essential for enhancing students' achievement, engagement, and overall participation in language learning (Cobb et al., 2010). Moreover, technology also provides students unlimited access to different resources and tools that facilitate language learning. With the help of technology, knowledge acquisition is no longer restricted to the classroom (Nordin Mohd et al., 2010). Thus, technology is embedded into all learning institutions investments and is a significant part of every learning institution budget (Oblinger & Oblinger, 2005).

Nevertheless, although mobile learning could be a viable support to cope with the students' language learning needs, the support could prove ineffective in the implementation later if the students resent the use of it (Sharples et al., 2005). Learners should accept and intend to use a proposed solution before the solution could be implemented (Venkatesh et al., 2003). Understanding the factors that influence students' technology acceptance and perception in different contexts is vital in integrating ICT in classroom and making it a successful programme (Hashim & Yunus, 2010; Yunus et al., 2010a). Moreover, in order to maximize the utilization of the technology in teaching and learning, the perceptions of the users towards the technology should be taken into consideration (Yunus et al., 2010b; Hashim & Yunus, 2012b). Hence, this study aims at investigating polytechnic English as Second Language (ESL) learners' attitude towards mobile learning. This study employed the UTAUT model to seek elaborative findings specifically on ESL learners' attitude towards mobile learning.

2. Unified Theory of Acceptance and the Use of Technology (UTAUT) (Venkatesh et al., 2003)

Understanding individual acceptance and use of information technology is one of the most mature streams of information systems research (Venkatesh et al., 2007). There have been several theoretical models, primarily developed from theories in psychology and sociology employed to explain technology acceptance and use. A review and synthesis of eight theories or models of technology use resulted in the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). It is a unified theory consists of eight theories/models which are Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behaviour (TPB), model combining the Technology Acceptance Model and Theory of Planned Behaviour (C-TAM-TPB), Model of PC Utilisation (MPCU), Innovation Diffusion Theory (IDT)

and Social Cognitive Theory (SCT). UTAUT explained about 70 percent of the variance in behavioural intention to use a technology and about 50 percent of the variance in technology use, therefore, has served as a baseline model and has been applied to the study of a variety of technologies in both organizational and non-organizational settings (Venkatesh, 2012).

3. Attitude towards Mobile Learning

Attitude towards behaviour is defined as an individual's positive or negative evaluation of performing the behaviour and it involves an individual's judgment that performing behaviour is good or bad and also a general evaluation that an individual is inclined or disinclined to perform the behaviour (Ajzen & Fishbein, 1980). According to TRA, attitude towards use is hypothesised to positively impact behavioural intention to use a device because a more positive attitude toward the system creates a stronger behavioural intention to use the system (Fishbein & Ajzen, 1975). Studies in information technology have also regularly reported that users' attitudes are important factors affecting the success of the system. Most theories consider attitude to be a relationship between a person and an object (Davis 1989).

4. Research Framework

The Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) serve as the foundation for this study. Guided by Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), this study primarily focuses on investigating the polytechnic ESL learners' attitude towards mobile learning. UTAUT addresses the issues with the performance expectancy, effort expectancy, social influence and facilitating conditions constructs. UTAUT seems applicable in regard to understanding students' acceptance and use of mobile learning. In this study, three variables from the UTAUT model, which are Performance Expectancy (PE), Effort Expectancy (EE) and Social Influence (SI), leaving Facilitating Conditions (FC) are adapted with some modifications to the framework. Perceived Language Learning Potential (PLLP), Learning Preference (LP) & Self-management of Learning (SML) were also added to the model. The framework of this study is illustrated in Figure 1.

Based on Figure 1, polytechnic ESL learners' perceptions were obtained based on seven main constructs, namely, performance expectancy, effort expectancy, social influence, perceived language learning potential, learning preference, self-management of learning and attitude. The following explains each of the constructs.

4.1. Performance Expectancy

In this study, performance expectancy dealt with the extent of usefulness of mobile learning for learning listening,

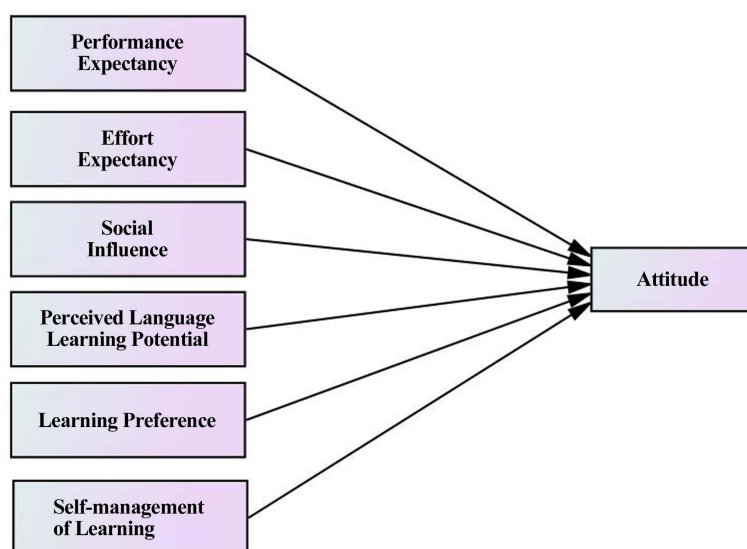


Figure 1. Research framework of the study.

speaking, reading, writing, vocabulary and grammar. Adapting performance expectancy to the context of this study suggests that polytechnic ESL learners will find mobile learning useful for their ESL learning.

4.2. Effort Expectancy

Effort Expectancy is defined as the degree of ease associated with the use of the system (Venkatesh et al., 2003). In this study, effort expectancy dealt with the ESL learners' perceptions towards mobile learning in terms of perceived ease of use and skills in using mobile devices for learning ESL.

4.3. Social Influence

Social Influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh et al., 2003). The findings of the previous studies suggested that learner's decision is also influenced by others, such as peers or instructors (Miller, 2003). In the context of this study, social influence is the extent to which students perceive that important for others (in this study; friends and lecturers) believe they should use a particular technology (Venkatesh et al., 2003) (in this study; mobile learning).

4.4. Perceived Language Learning Potential

Perceived Language Learning Potential refers to the degree of opportunity present for beneficial focus on form. It refers to the extent to which the activities can be considered to be a language learning activities rather than simply an opportunity for language use. Chapelle (2009) suggested that students should have sufficient opportunity under this factor.

4.5. Learning Preference

Learning Preference is included in this study as it is seen as a vital part in language learning. Park's (2002) interpretation of these findings was that learning preference effected students' performance level. This led to the conclusion that there is a significant effect of learners' learning preference on their attitude towards using mobile learning.

4.6. Self-Management of Learning

Self-management of learning refers to the extent to which an individual perceives he or she is self-disciplined and enables to engage in autonomous learning (Huang, 2014). Successful learning is derived from learner's control of the learning activity, exploration and experimenting, asking questions and engaging in collaborative argumentation.

4.7. Attitude

Mantle-Bromley (1995) and other experts in psychology said attitude consists of three components in general: 1) affect: which refers to that degree of like the person has; 2) cognition: which refers to the person's knowledge about the attitudinal object; and 3) behaviour: which is related to reactions and intentions regarding the object. Bruess (2003) said attitudes toward technology play an important role in the adoption of instructional technology and the likelihood of influencing students' learning in the classroom.

5. Methodology

This study involved 378 semester one students from four polytechnics. The samples characteristics were analysed using frequency distribution. The samples comprise of 378 semester one students from four polytechnics which were selected from each zones (north, middle, south and east). They were selected through stratified random sampling comprise of male and female (Table 1) from two main streams which were technical and non-technical (Table 2).

Table 1 exhibits the list of respondents based on the gender. From the 378 students involved, 190 (50.3%) were male, while 188 (49.7%) were female. Table 2 presents the list of respondents based on their education background.

Table 1. List of respondents according to gender.

Gender	Frequency	Percentage (%)
Male	190	50.3
Female	188	49.7
Total	378	100.0

Table 2. List of respondents according to education background.

Background	Frequency	Percentage (%)
Technical	174	46.0
Non-technical	204	54.0
Total	378	100.0

Referring to **Table 2**, there were two main education backgrounds which were technical and non-technical. From the total number of respondents, 174 (46%) were doing technical courses, while 204 (54%) were doing non-technical courses. The number of students from the non-technical background was found to be more than the technical because the number of intake for the non-technical students is more than the technical students.

The survey instrument was constructed based on the framework and was adapted from instruments developed by Venkatesh et al. (2003) on Unified Theory of Acceptance and Use of Technology (UTAUT) and also derived from previous literature. Some changes were made in order to meet the purpose of the study and to fit the present condition of the subjects. As in the original UTAUT survey instrument, Likert scales (1 - 7) with anchors ranging from “strongly disagree” to “strongly agree” were used in this study (refer Appendix A for the instrument).

6. Findings and Discussion

As mentioned, the investigation into ESL learners’ towards mobile learning as a support to their English language learning needs was based on the Unified Theory of Acceptance and Use of Technology (UTAUT). The report of the findings reveals the ESL learners’ attitude towards mobile learning through the key constructs. Thus, the following section reported on the needs based on the six parts of the UTAUT key constructs. Mean scores for each construct: 1) performance expectancy; 2) effort expectancy; 3) social influence; 4) perceived language learning potential; 5) learning preference; and 6) self-management of learning were calculated. The mean scores for each construct are presented in **Table 3**.

As shown in **Table 3**, it was found that all constructs scored between 5.26 and 5.76. The mean score obtained for each of the constructs was; performance expectancy 5.77, effort expectancy 5.37, social influence 5.29, perceived language learning potential 5.33, learning preference 5.33, self-management of learning 5.30 and attitude 5.26. These indicate that the respondents rated performance expectancy as the highest, while attitude as the lowest. The results show that majority of the ESL learners believed that the use of mobile learning is useful for learning ESL. As for the effort expectancy, it shows that it is important for the learners to perceive the ease of use and skills in using mobile devices for learning ESL. Apart from that, it shows that in implementing mobile learning for learning ESL, the learners posit that they feel comfort in using mobile for learning ESL. It shows that the ESL learners have no problem to read or even to conduct any learning activities via mobile learning. Learning preference is vital in language learning as it affects students’ performance level. This led to the conclusion that there is a significant effect of learners’ learning preferences on their attitude towards using mobile learning. The findings also suggest that the ESL learners perceived the language learning potential by using mobile learning and that they are aware of the activities that can be considered to be a language learning activities rather than simply an opportunity for language use. As for the self-management of learning, it shows that the learners have control of their learning activity. In this study, it shows that the ESL learners also perceived that it is important for others to believe they should use a particular technology to enhance their ESL learning. Overall, the findings also show that the ESL learners have positive attitude towards mobile learning.

Table 3. Mean scores for each constructs.

Construct	Min	Max	Mean	Std. Dev
Performance expectancy	4.14	7.00	5.7680	0.56075
Effort expectancy	3.20	7.00	5.3677	0.75575
Social influence	2.50	7.00	5.2857	0.71228
Perceived language learning potential	2.57	7.00	5.3277	0.61691
Learning preference	3.00	7.00	5.3330	0.60674
Self-management of learning	2.50	6.75	5.2996	0.63733
Attitude	2.25	7.00	5.2626	0.73606

7. Limitation of the Study and Directions for Future Research

This study contributes to the knowledge based on mobile learning acceptance by building on past empirical and theoretical research. The research study had the following limitations: i) the scope of the study is limited to polytechnic ESL learners setting thus the results will have limited generalizability; ii) it is expected that most students have not experienced the actual use of mobile learning. Therefore, they will use their knowledge and perceptions to respond to the survey on mobile learning; iii) participants self-reported their answers to the research instrument. Bias effects could be presence; and iv) this study measures perceptions at a single point in time. However, perceptions change over time as individuals gain experience (Venkatesh et al., 2003).

As far as the directions for future research are concerned, although technology acceptance research has been applied to many different settings, research in the area of attitude towards mobile learning for the purpose of learning English as Second Language (ESL) is relatively new and more research is needed to further the knowledge based in this area. Several opportunities are available to extend this study or discover new areas of research. The following are some suggestions for future research on acceptance of mobile learning. Firstly, this research study mainly investigated learners' attitude for mobile learning. Thus, there is a great opportunity to investigate the attitude towards mobile learning among ESL lecturers, which may lead to a better understanding of all aspects of mobile learning. Second, this study was conducted in polytechnic setting, and therefore a study at other institutions such as community colleges or universities could help with generalisation of the study and further validate research findings. Third, a more detailed study of the perceived language learning potential dimensions could be developed not only for presenting relationship between this factor and attitude towards mobile learning but also for the purpose of educational system design and mobile learning application development.

8. Conclusion

Referring to the results, students were found to have positive attitude towards mobile learning. These findings justified the needs to incorporate the use of mobile devices as learning support to the learners' ESL learning to improve their language competence. This was vital for the success implementation of a learning solution as Venkatesh et al. (2003) argued that the learners should accept and intend to use a proposed solution before the solution could be implemented. In order to understand how to best use mobile devices for learning English, the first step was to understand the students' perceptions of using these devices for learning and education. User perceptions and acceptance of mobile device usage in educational settings, whether direct, as in course materials, or indirect, as in course and pre-university administration, was an important component of a complete and comprehensive model of mobile learning. User perceptions and perceived acceptance of mobile learning by students could provide information needed by polytechnics and educators to make better decisions regarding mobile learning implementation.

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