Student Preferences for M-Learning in Higher Education Institutions

Mustafa Azmi Bingol *

Abstract

It is inevitable to use different high-tech devices, particularly smart phones, in today's rapid life. As a result, educators who work in this sector try to take advantage of developing technology in order to implement the teaching and learning process. Nevertheless, applying mobile learning to educational institutions requires special studies in order to adapt and implement the materials. Due to this reason, it is necessity to make a much more decent research on the acceptance of m-learning by students in terms of setting up m-learning systems in universities. The main goal of this research is to find out the students' acceptance of mobile learning in Northern Iraq. The questionnaires were used to guide the educators to comprehend the research aim unambiguously and clearly. This study involves three primary research questions that propose to solve with the analysis of the findings, which are gathered by conducting questionnaires: How do university students accept mobile learning through devices inside and outside of the class? What is their level of mobile usage as a learning tool? And whether the students are ready to adapt mobile-assisted language learning. As a result of the research more than half of the students has revealed a positive attitude to use mobile devices in the process of learning. And most of them agree that mobile devices could be used as a learning tool. According to the last section of the questionnaire, students are ready to adopt mobile learning.

Keywords: mobile learning, higher education, students' motivation

Introduction

The introduction of mobile devices into the education world has changed the classical understanding of education from limited to certain place and time to education obtained everywhere and any time. As Lehner and Nosekabel (2002) have mentioned, there have been recent changes from traditional methodology to the modern ones like e- and m-learning which, as they have described, provide the opportunity to get the knowledge without being subject to time and place. As the technology develops and user friendly devices or software are produced, teachers and learners become active users of this technology, not only in the classrooms, but also outside them. Especially, thanks to the internet, four-wall education has trespassed its borders throughout the world. The internet has made the distance-mode learning possible and this mode has become very popular. Consequently, this popularity has increased the interest in mobile devices as the source of education both inside the school and outside. According to Oberg and Daniels (2012), the majority of researchers have tried to make use of mobile devices in terms of using them during the educational processes; however, it is a difficult thing to fulfil the educational tasks over the mobile devices. Supporting this idea, Iqbal and Bhatti (2015) have stated that the youth show a deep interest in the mobile devices, especially mobile phones. This interest has drawn attention of the researchers who have thought how to make benefit of these devices to be able to contribute to the education.

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*   Ishik University, Erbil, Iraq
       E-mail: mustafa.bingol@ishik.edu.iq

Similarly, according to Koole (2009), the experience of the users, here refer to learners and teachers, and their capcaity to use the mobile devices and their reactions against the mobile learning as well as learning itself are the key factors to fullfil the mobile-based activities.

Motiwalla (2007) suggested that mobile learning, that can be abbreviated as M-learning, is a step forward in the education. Educators or the learners get wirelessly connected to each other via m-learning software to be able to perform e-learning or distance learning. In this sense, it also serves as an auxiliary resource or methodology for the current learning strategies. Especially, in terms of higher education, it is possible to find many applications that can be used during the classes or outside the classes to complete any task.

Kim (2006) has mentioned that m-learning devices contribute to the interaction among learners and edcuators. In Kim's perspective, while making use of m-learning, the users, namely teachers and students, do not only deal with text messages, pictures and watching; they also have communication among each other and this communication gives strength to the learning efficiency.

Some researchers have conducted the studies on the acceptance of mobile learning among the students (Liu, Li, & Carlsson, 2010; Park et al., 2011; Wang, Wu, & Wang, 2009). The studies have shown that students who do not have trouble with using their own devices effectively, show more tendecy to accept the m-learning technology. In this sense, the students who will use m-learning for their eduational purposes must be supported with the very necessary functions of the relevant applciations. According to Wang and Shen (2012), a proper training process is highly required. This training should cover how to use the applications; how to arrange the materials and how to process mobile learning with the current educational materials. Thus, it is very true to say that the experience of mobile devices affect the acceptance of mobile learning by students. Within this context, educators must be trained sufficiently about how to make use of the mobile technology and applications during the classes and researchers should study the effects of educators in the mobile learning and the methods to provide effective teaching (Aubusson et al., 2009). In other words, as Ally (2009) has suggested, teaching materials must be redesigned in terms of mobile technology and by doing so, the process of learning will not be limited to the classroom; it will be always avalibale in students' pockets; somehow learning will turn into mobility.

Cochrane (2010) has found out as a result of the examination concerning the factors affecting the success while making use of m-learning that designing the materials in a well-established pedagogical unity of m-learning elements and lesson assesments. The role of teacher is to define how to process m-learning, provide sufficient and explanatory feedback for the students and the decent choice of mobile items, including the applications to be used and its delivery to the learners.

The gaps listed by Cochrane in his research (2012) on mobile learning are as follows:

- Lack of pedagogical theories to design materials;

- Trouble with evaluation of m-learning tasks;

- Lack of sufficient and detailed studies on practicality of m-learning;

- Providing necessary assistance to the learners;

- Providing necessary assistance to the educators;

On the other hand, the physical characteristics of the mobile devices are some of the factors affecting the efficiency of mobile learning. In this sense, the size, keyboard functions, touch screen or non-touch screen, and audio quality are some of those factors.

This study involves two primary research questions that propose to solve the problem with the analysis of the findings, which are gathered by conducting questionnaires. The following study questions are to be answered:

1. How do university students accept mobile learning through devices inside and outside of the classroom?

2. What is their level of mobile usage as a learning tool?

3. How are the students ready to adapt mobile - assisted language learning?

What is Mobile learning?

It is not easy to define accurately mobile learning also known as 'm-learning'. Kadirire (2009) states that," mobile learning can mean different things to different people" (p.15). There are bunches of different definitions offered by many different scolars, since the introduction of the term 'mobile learning'. The definitions may differ according to the angle mobile learning is viewed.

O'Malley et al. (2003), define mobile learning as "any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantages of the learning opportunities offered by mobile technologies" (p. 6). That is to say, learners can learn anywhere and at any time with the any type of mobile devices like PDA, smartphone, tablet, etc. Thus, there are definitions that emphasize the application of mobile devices, while other definitions emphasize that the process of learning is not limited to the classroom or some other fixed place (computer lab, home) where contemporary technologies are available.

Mobile Learning in Higher Education

All stages of education have the potential to support mobile learning, especially higher education is suitable for it. When we look at the mobile learning of university students, we can see that nearly 100% of students use it to mthis or that degree. Each and every student normally has at least one mobile device. So they cannot be ignored as a tool that help the instructor to use them for learners' benefit.

Despite the necessity of mobile learning in higher education, when implemented, it is likely to face many technical and cultural problems (Cheon et al. 2012). To overcome these challenges, Cheon et al. (2012) examine the students' perceptions of mobile learning in higher education. Above all things, it should be investigated whether students are ready to learn with a mobile system.

Statement of the problem

Mobile devices have occupied every part of our lives. They have already been used as a communication tool for a long time, but nowadays they are mostly being used as an entertainment, while they need to be used as an educational tool, too. Because of their small size, these technologies are more popular than computers among wide masses of young people. The common availability of mobile devices and their ability to handle multifunctional tasks has increased the motivation of some researchers to explore the possibility of the application of these technologies for language teaching and learning.

Data Collection Tools

A questionnaire in order to understand students' perceptions of the use of mobile technologies in language education at the university was developed based on the literature review on mobile learning, learning with mobile in general and the researcher's observations of mobile device use. This tool was chosen, as it is considered one of the most effective instruments in second language research for collecting attitudinal information (Dörnyei & Taguchi, 2010). A five-point Likert scale was applied to assess the given items, employing a scle of answers from 'strongly disagree' to 'strongly agree' in order to collect quantitative data. The obtained results were then analyzed by SPSS 25 program. A factor analysis of the items was used.

Methodology

This study explores Ishik university EFL students' preferences towards using mobile learning. There are a number of limitations in this study. First of all, the the participants of this study are 60 EFL students from Isik University - a private university located in Northern Iraq. Secondly, the sample is only BA students from one (education) department. Although the questionnaire is considered as a suitable tool for a survey research, other tools such as interview and class observation would be a good support to the survey to better understand the problem under investigation.

The main purpose of this section is to investigate whether students are ready to adapt mobile learning language or not. By doing this, the students were asked to respond to several items using the five-item Liket scale question type.

Data Analysis

The personal information of students included their age, gender, and the type of mobile devices they own. They were selected at random among the faculty students. The findings of this section revealed that the age of participants is between 18 and 28 years old.

Table 1. Students' credentials

Personal information

		Frequency	Percent	Valid Percent	Cumulative Percent
Age	18	16	26.7	26.7	26.7
	19	14	23.3	23.3	50.0
	20	8	13.3	13.3	63.3
	21	6	10.0	10.0	73.3
	23	7	11.7	11.7	85.0
	24	4	6.7	6.7	91.7
	25	4	6.7	6.7	98.3
	28	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

The students aged 18 were 16 (27%), aged 19 were 14 (23%), aged 20 were 8 (31%), aged 21 were 6 (10%), aged 23 were 7 (12%), aged 24 were 4 (7%), aged 25 were 4 (7%) and only one student was aged 28. Female students were more than male. According to the results of the survey, from 60 students 35 students (58 %) female and 25 students (42%) are male.

Table 2. Students' prior knowledge

	Yes	No
First item	57	3
	95.0%	5.0%
Second item	51	9
	85.0%	15.0%
Third item	42	18
	70.0%	30.0%
Fourth item	55	5
	91.7%	8.3%

When we look at the first item of table 2, the majority of the students 57 (95%) knew how to download a mobile application. Other 3 students might not have internet or smartphone. The next items on the survey asked students whether they knew how to traslate a sentence into another language on a mobile device. Here again 85% of students (51) stated that they could translate a sentence through mobile devices. In the third item 70% of the student can easily access a social networking site on a mobile device. And the last item of the first part of the questionnaire was about how to post a comment to a blog or to respond to a post on a mobile device. Once again, a great number of the students 55 (92%) knew how to post a comment or respond on a mobile. Those five students may not have a social media account because of several reasons.

Table 3. Students' attitudes towards the use of mobile devices inside classroom (Research question 1)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
q.1	40	9	5	4	2	60
	66.7%	15.0%	8.3%	6.7%	3.3%	100%
q.2	36	9	8	4	3	60
	60.0%	15.0%	13.3%	6.7%	5.0%	100%
q.3	33	10	9	6	2	60
	55.0%	16.7%	15.0%	10.0%	3.3%	100%
q.4	40	11	5	4	0	60
	66.7%	18.3%	8.3%	6.7%	0.0%	100%

q.5	20	10	5	16	9	60
	33.3%	16.7%	8.3%	26.7%	15.0%	100%

In the second part of the questionnaire we were looking for the attitudes of university students' acceptance of mobile learning through devices inside the classroom. In the first question totally 81% of the students agrees that mobile devices would be used for learning inside the classroom. In the second question totally 75% of the students supports the idea that mobile learning can inncrease cooperation and totally 71% thinks m-learning raises interaction between learner to learner and learner to teacher. In the fourth item totally 85% of the attendants states that mobile devices could be allowed as a learning material. But in the last question only half of the students agrees that students should be encouraged to use mobile devices inside the classroom, which means that they expect mobile devices to be used only out of classroom.

Table 4. Using mobile devices as a learning instrument (Research question 2)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
q.1	14	5	20	12	9	60
	23.3%	8.3%	33.3%	20.0%	15.0%	100%
q.2	25	15	13	4	3	60
	41.7%	25.0%	21.7%	6.7%	5.0%	100%
q.3	40	12	3	1	4	60
	66.7%	20.0%	5.0%	1.7%	6.7%	100%
q.4	15	10	10	10	15	60
	25.0%	16.7%	16.7%	16.7%	25.0%	100%
q.5	10	7	5	18	20	60
	16.7%	11.7%	8.3%	30.0%	33.3%	100%

In the second part of the questionnaire we seek the answer to the question whether university students accept mobile learning. In the first question totally more than 31% of the learners reported that they use mobile phones for listening purposes. In the second item, totally almost 67% of respondents uses mobile phone to watch videos. The next question's result shows that totally almost 88% of the participants uses mobile phone to play games, as it was expected. When we look at the fourth question, totally almost 42% of the students uses mobile phone to take notes. In the last question totally only 28.4% of the learners uses mobile phone to read something. Thus, we can conclude that students most often use mobile devices for watching videos (which, besides entertainment, develops their listening skills) and playing games (which might enrich their vocabulary, depending on the game they use).

Table 5. Students' acceptance of adapting mobile learning (Research question 3)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total

q.1	44	10	3	1	2	60
	73.3%	16.7%	5.0%	1.7%	3.3%	100%
q.2	17	19	9	8	7	60
	28.3%	31.7%	15.0%	13.3%	11.7%	100%
q.3	41	13	1	3	2	60
	68.3%	21.7%	1.7%	5.0%	3.3%	100%
q.4	30	21	5	2	2	60
	50.0%	35.0%	8.3%	3.3%	3.3%	100%
q.5	35	17	3	2	3	60
	58.3%	28.3%	5.0%	3.3%	5.0%	100%

In the last section of the questionnaire the students were asked about their readiness to adapt mobile-assisted language learning. In the first question totally almost all participants (90%) stated that they are ready to use mobile devices for learning purposes. In the second question totally 60% of the learners responded that they need training to use mobile devices for learning purposes. In the third and fourth question students were asked whether they can afford the payment of internet access and application for learning purposes. Totally 85% of the learners responded they can pay internet and application fees. In the last question totally nearly 87% of the learners were ready to use their own mobile devices for learning.

Results

This research clearly shows that learners have positive attitudes to mobile learning. Mobile learning make learning procedures more easier.

Discussion of the results

The obtained results – the readiness of the students for mobile-learning - are in agreement with the previous research (Igbal & Bhatti, 2015; Liu, Li, & Carlsson, 2010; Park et al., 2011; Wang, Wu, & Wang, 2009). However, as the obtained answers do not show a 100% or close to it numbers, it means that challenges also exist and must be dealt with, as shown in Koole (2009).

Recommendations

According to the questionnaire results, the following recommendations might be suggested:

- ✓ First of all, mobile devices can be used for teaching activities including listening, speaking, reading, and vocabulary.
- ✓ It is important to raise studens' awarness towards the usefulness of mobile learning.
- ✓ Using mobile devices should be allowed during learning activities.
- ✓ Internet access should be free while classes are being held to let all students to participate.

✓ Opening free training courses is necassary for both students and lecturers.

✓ There can be a resource file for useful applications in order to utileze mobile learning.

Conclusion

Mobile learning is becoming a very popular topic day by day. The aim of this study was to gain information about students' perceptions related to mobile learning. In order to collect sufficient data a questionnaire survey was conducted which revealed the feasibility of m-learning. On the other hand, there are some challenges to its application, as well. The use of mobile learning in higher education is limited unless it has sound theoretical bases. Scholars should make more research in the field of mobile learning in higher education. This study provides some basic data of students' acceptance of mobile learning and it might help the similar researches that would held in the future.

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