

Investigating and Finding the Attitudes and Self Efficiency of Learners in Iraqi Higher Education by Using Portable Devices

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Abstract:- Prior studies have referred that computers and the Internet play a very significant role in the acceptance of students and the using of new information technology. In recent years, with the fast development of mobile technology, mobile learning (m-learning) has become a popular subject. However, little is known about students' attitudes and self-efficiency with the use of a mobile device in learning. The aim of this study is to investigate the attitudes and self-efficiency of the use of mobile devices and learning for college students in English language class by hiring task-based instruction. The sample group consists of 60 students study in the first year at University of Baghdad- center of English language in Iraq. Who used mobile devices for m-learning in English language activities, to complete assigned tasks under the guidance of the instructor. Results showed that the most students are that motivation for English language activities via mobile was strengthened and mostly positive attitudes towards m-learning Also effects for future research and training of m-learning are discussed.

Keywords:- attitude, self-efficiency, m-learning, English language, learning, task-based approach

I. INTRODUCTION

Cellular technology has attracted growth, such as mobile phones and smart phones and personal digital assistants (PDA), and Tablet PCs attention educators and researchers (Chinnery, 2006; Patten, Sa'nchez & Tangney, 2006) for the consideration of educational effects (Ally, 2009) .This education through mobile devices plays an important role in the field of learning, considering that 98% of university students have cell phones. Transmit the educational use of mobile devices as mobile learning (M-Learning) focusing on the facilitating and broaden education and learning, such as knowledge building, and information collection and sharing, and cooperative learning (Specht & Kravcik, 2006), independent learning(Cui & Bull, 2005) ,and lifelong learning (Traxler & Kukulska-Hulme, 2005), for example, was adopted system mobile blogging as a way to generate the interactive and collaborative learning chances for people geography of distributed groups. (Sharples, Lonsdale, Meek, Rudman, & Vavoula, 2007). Use of mobile phones in the achieving based learning to allow learners to collect information during school visits to museums.

Mobile learning has been confessed as a helpful approach in learning skills training (for example, Jeng, Wu, Huang, Tan, & Yang, 2010; Huang & Chang, 2011; Arslan & Şahin-Kızıll, 2010),View informal spontaneous, contextual, features, and mobile phones everywhere, pervasive, and mobile personality learning, and offered for students and increasing access to greater abundance exposure authentic learning contexts(Naismith, Lonsdale, Vavoula, & Sharples, 2004) .Authentic learning contexts to help students bridge the gap between learning experiences the formal and informal (Chao, 2006) . In other words, the real tasks in real world situations allow students to connect the contents of textbooks with real-world substances to achieve a better understanding and learning results. Wagner and Wilson (2005) were also highlighted that students can transport better learning skills gained in real-life situations if they have been placed on the learning skills through mobile in real contexts. Moreover, students demonstrated high motivation to learn when he became engaged in a genuine learning task.

Experimental studies have proved relevant mobile learning on active learning in general. For example, Attewell (2005) designed a mobile learning project to stimulate students to learn a foreign language. Found that 82% of students improve reading understanding and spelling skills through mobile learning, and 62% of students from constant use of mobile phones for learning. And recruited (Hsu, 2012), of students from 60 universities to study the effectiveness of mobile devices and traditional flashcard to learn English

vocabulary. The results showed that students show better academic performance in learning vocabulary and positive attitudes towards learning through mobile vocabulary learning English.

Many factors may negatively affect on the effectiveness of mobile learning in education, which leads to a reduction participation rate of students learning in mobile learning (Resta & Laferrière, 2007; Traxler, 2007; Mompean, 2010). The computer self-efficacy and attitudes essential factors determining the success of students participate in mobile learning (Isman & Celikli, 2009), and previous studies pointed out that people with computer high self-efficacy were more proactive in activities related to computer ((Legris, Ingham, & Collette, 2003; Delcourt & Kinzie, 1993; Gist, Schwoerer, & Rosen, 1989), Is defined computer self-efficacy (CSE) as the judgment of one's ability to use the computer (Campeau & Higgins, 1995; Thatcher & Perrew, 2002)

In other words, CSE indicates to the think that it has the competence to use computers (Klassen et al., 2009) .And was often seen as the attitude toward computers as a fundamental element of the CSE (Compeau & Higgins, 1995; Kinzie, Delcourt, & Powers, 1994; Hassan, 2003).Prior studies have uncovered that the CSE also affected by the psychological factors, including anxiety and perceptions toward computer computers and beneficial tools and self-directed (Netemeyer, Boles, & McMurrian, 1996; Kao & Tsai, 2009). In the study of the relationship between the CSE and computer anxiety, Compeau and Higgins (1995) Found that people with reduced CSE was more frustration and anxiety in the operation and use of computers to solve the problem. Some researchers also linked the social cultural backgrounds such as individual races and ages, or years of using the computer with the CSE and attitudes towards computers (Sun, Tsai, Finger, Chen, & Yeh, 2008; Harvey & Wilson, 1985; Mahdi & Kartika, 2000), However, it has been relatively scarce research studies on mobile learning nature of the CSE and its relationship with the students' attitudes toward the use of mobile learning for English language activities.

II. OBJECTIVES OF THE STUDY

The purpose of this study is the use of mobile attitude surveys (MAS) and mobile self-efficacy survey (MSS), for investigating the relationship between attitudes and CSE of the students toward m-learning. Moreover, there are a number of other variables are, including the gender and Internet experience, as well as analysis. In this study, three issues:

- A) To understand the attitude of the students did not learn of the use of mobile devices.
- B) To find out students' self-efficacy in the use of mobile devices have not learned.
- C) To find the difference between the sexes in term of students' attitudes and self-efficacy in m-learning

Search technique

The study sample consists 58 of college students in the first-year (48 males and 10 females), who have minimum experience of using mobile devices for M-learning. The students from the center of English language in Baghdad University. Before, 58 students were trained for 2 weeks before the implementation of mobile learning. The efficiency of the students were identified through their score in English language test of the entrance exam in the intermediate stage before through which they deserved admission to the University.

Search setting

Participants taking Advanced English session at the University of Baghdad- center of English language in Iraq. We used Academic Connections as reading material for the session. Within the textbook, and instructor chose two main themes for students to read and perform the tasks. Scientific development and trade. Activities continued for six weeks, and included in-class education and monitoring activities and learning. After reading, students and researcher set different tasks for in-class online discussion. For example, many of the environmental problems facing our planet and the environment in which we live them, so what are the ideal ways and means to overcome these difficulties growing, which included solving skills, through helped and encourage students to negotiate meanings and implement problem talks.. Was created five scenarios of the situation on the basis of these two units for students to perform problem-solving tasks discussed in the mobile learning environment. All students use their mobile phones after school to search information, and dissemination of, respond to questions, and related materials imaging.

III. DATA COLLECTION AND ANALYSIS

To investigating and find-out the attitudes and self efficiency for learners in Iraqi higher education by using portable devices towards mobile learning, we adopted two instruments: a survey attitude learning and learning survey of self-efficacy. Attitude has been modified survey to learn from Tsai, Tsai, & Hwang (2010) scale attitude PDA, with some additional adjustments that are being implemented by the researcher. Was derived self-learning effectiveness of the implementation of the survey in this study from Tsai and Tsai (2003) online survey of self-efficacy. Some have been modified items in order to meet the requirements of mobile learning. Researcher also interviewed 20 volunteer students (15 male and 5 female). Each interview lasted for

30 minutes, and was used semi-structured questions. The recorded interviews and wrote later to analyze the data. The guidelines were adopted for objective analysis (Brown and Clark, 2006) to analyze the interview data. Encoded different encoding units. First, such as the effectiveness of computer students and attitude toward learning, to the main categories. Next, stronger units on the basis of comments and observations on M-learning experience. Last, describes a researcher of the meanings of each unit and summarize key data provided by the students for further interpretations and conclusions.

IV. Results

First issue: in order to understand students' attitudes and self-efficacy about m-learning, managed two instruments: survey position M-learning and learning survey of self-efficacy. Table 1 Results of reporting students' attitudes toward m-learning. The results indicated that most students would like to use mobile devices to participate in learning and intensive discussions on the Internet at any time and in any place (Mean=4.17, SD=0.43). M-Learning support students in achieving more ideas, increase motivation to learn, promote fiction work, and work independently and collaboratively. Just was only one negative view of m-learning in the survey of m-learning attitude. Question 5 showed in Table 1 that the students were uncomfortable with the use of mobile devices (Mean=4.64, SD=0.42).

In interviews (Table 2), pointed out a lot of students that use the mobile device to the existing task assignments to really strengthening their motivation and they have more fun in computer science and network learning. They believed that it saved a lot of their time because they can still participate in the task without constraints of time and space. They agreed that the computer science and networking learning will be held at any time and in any place with mobile devices.

Table 1 The students' attitudes towards m-learning

| Q | item | Mea n | SD |
|----------------|--|-------------|-------------|
| 1 | With this environment, the mobile device maybe motivates me to achieve more ideas. | 4.82 | 0.54 |
| 2 | With this environment a mobile device is useful and suitable for my learning. | 4.38 | 0.22 |
| 3 | With this environment a mobile device can enhance my desire to learn. | 4.72 | 0.38 |
| 4 | With this environment, a mobile can be a portable device that allows me to do something more interesting and innovative. | 3.78 | 0.72 |
| 5 | With this environment, a mobile device makes me feel boring | 4.64 | 0.42 |
| 6 | With this environment, I feel bored using a mobile device. | 2.13 | 0.42 |
| 7 | With this environment, I am not good at using a mobile device. | 3.90 | 0.36 |
| 8 | With this environment, I hope to have a regular time to use a mobile device. | 4.02 | 0.34 |
| 9 | With this environment, and I hope that apply to mobile devices in various learning activities. | 4.68 | 0.50 |
| 10 | With this environment, I can use the mobile device independently without the help of others. | 4.69 | 0.32 |
| Overall | | 4.17 | 0.43 |

Table 2: The students' statements in the interviews for attitudes towards m-learning

| Statements | Frequency (N=20) |
|---|---------------------|
| It is quite fun to use a mobile device for networking learning. | 20 |
| I hope I can use mobile devices to learn in other classes as well. | 15 |
| I like to use mobile devices to multi-task. | 14 |
| It is to save time for M-learning because I can learn without time and place restrictions. | 12 |
| I would like to get on my mobile devices and learning occurs naturally. | 11 |
| I did not like learn networking via mobile before. Now I would like to use my smart phones for learning networks. | 9 |
| Reading too much on the mobile made my eyes sore. | 8 |

Second issue: To find out students' self-efficacy in the use of mobile devices have not learned. Table 3 shows that students have high self-efficacy about m-learning. The students were not a problem with the use and

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functionality in portable devices such as downloading material on the Internet, as well as reading and enter information.

Table 3 The students' self-efficacy of the m-learning

| Q | Item | Mean | SD |
|---|--|------|------|
| 1 | With is environment, I can download a figure from the internet using a mobile device. | 4.52 | 0.22 |
| 2 | With is environment, I can key in a website address to enter the site using a mobile device. | 4.78 | 0.18 |
| 3 | With is environment, I can check a hyperlink to enter another website using a mobile device. | 4.68 | 0.14 |
| 4 | With is environment, I can read the content on the screen using a mobile device. . | 4.80 | 0.16 |
| 5 | With is environment, I can enter words into a document using a mobile device. | 4.25 | 0.22 |

Students indicated that they can be used effectively functionalities of the mobile devices (Table 4). Can use the mobile device to support their discussions with their counterparts such as the publication of a question and provide feedback immediately. With the mobile device, tried to relate to reading material by taking pictures and filming the relevant cases to share with their peers. Provided that real images and scenarios for their peers to visualize the ideas presented in the reading. Students tried to expand the formal education of textbooks for non-formal education in their daily lives.

Table 4: The students' statements in the interviews for self-efficacy of m-learning

| Q | Statements | Frequency (N=20) |
|---|---|------------------|
| 1 | I could use the mobile device to discuss with my peers about the reading materials. | 20 |
| 2 | I could log into the discussion forums via the mobile device. | 15 |
| 3 | I know how to post questions about the reading via the mobile device. | 14 |
| 4 | I know how to respond to pees' questions via the mobile device, which made the learning more interactive. | 12 |
| 5 | I can take pictures with my phone to show the related information about the assigned tasks. | 12 |
| 6 | When it comes to typing, it's rather difficult. There is no keyboard to type with and the screen is too small. It was inconvenient to write messages to answer peers' questions on mobile devices | 10 |
| 7 | I could use the mobile device to film some clips and share with my peers about what we have learned in class. | 9 |

Third issue: To find the difference between the sexes in term of students' attitudes and self-efficacy in m-learning. From Table 5. It was clear that there were no statistically significant differences between male and female attitudes and self-efficacy in m-learning. However, there was a slight difference between the attitudes of male and female students from the interview data. Table 6 shows that male students were more accustomed to the use of a mobile device to learn English language activities inside and outside of the class. In contrast, the female students perceived the mobile device as an attachment student's entertainment.

Table 5: Gender comparisons on mobile learning attitudes and mobile self-efficacy

| Mobile attitude survey (MAS) | male (n=15) | female (n=5) | 1-tailed t-test |
|-----------------------------------|-------------|--------------|-----------------|
| | 4.24 (0.39) | 4.08 (0.44) | 0.183 |
| Mobile self-efficacy survey (MSS) | 4.71 (0.13) | 4.50 (0.24) | 0.002 |
| P<0.01 | | | |

Table 6: The male and female students' statements in the interviews for mobile learning attitudes and self-efficacy

| Statements | Frequency (Males=15) |
|--|-----------------------|
| The mobile phone is like a toy to me. I like to use it for our tasks. | 12 |
| I would attend to the new message on my mobile every hour | 10 |
| It is very cool to use mobile phones for networking learning. I shared some learning materials with my family members too. | 9 |
| Statements | Frequency (Females=5) |
| I did not like to do the assignments on the mobile phones. | 5 |
| My phone is not as fancy as others so I did not find it easy to do the tasks. | 3 |
| Mobile devices are only for entertainment. I do not think it is ideal for networking learning. | 2 |

V. DISCUSSION AND CONCLUSION

Major contribution of this study is to determine, investigating and find-out the attitudes and self efficiency for learners in education environment (for example here Iraqi universities) toward mobile learning. Moreover for reporting and views are seen from students at the college after the implementation using mobile devices in their learning in computer Science and networks. Tasks are based on the design of the various scenarios and reading materials to support student learning mobile phone through the use of a task-based approach. The results showed that students showed positive attitudes towards learning. Considered that students learn to provide them with more opportunities to get more information and collaborative learning and support everywhere. Students are expected in many cases to receive messages from peers via mobile devices to exchange and shared their views in online discussion forums.

Because the nature of mobile devices made the learning everywhere. And chanted the results of previous studies in this project mobile learning can increase students' learning on Contributions in learning functions. (Attewell, 2005; Basoglu & Akdemir, 2010). Furthermore, this study found that students are competent enough to use mobile devices to read the assigned texts, questions, read and provide feedback to colleagues. The students also took pictures and environmental scenarios for original portray what they have learned in school textbooks. Then shared their photos and movies via mobile devices. In other words, students have high CSE for mobile phones, and thereby they will be connected with genuine materials and learned. This study also tried to show the relationship between students' self-efficacy and attitudes within the sexes.

However, basis of a survey, Outcomes that were detected there is no big difference in students' self-efficacy and attitudes among students (male and female). From the interview, male students showed great interest in the use of mobile devices to get involved in learning those tasks assigned to it, but the female students pointed out that inclined to be used for entertainment purposes only.

This study provided extra support in the computer for students of self-efficacy and attitudes and essential factors which affect the success of mobile learning. This study also provides an analysis of the students' perceptions of their attitude and self-efficacy for mobile learning. Results revealed that gender was not a central factor that influenced the self-efficacy and attitudes towards learning but may look for learning purposes a little differently.

This study was limited by focusing on learning of style learning based on only for the task. It is only through continuous assessment and refinement of this new technology (for example. mobile phones, pads, and laptops) with practice learning (for example. lesson planning, and information technology support, and learning plan activities) that an educational innovation such as mobile phone will reach full potential to transform educational practice.

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