

Mobile Learning Concept and Its Effects on Student's Attitudes Case Study: Egyptian Faculties

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Abstract. The spread of mobile devices and wireless networks help the learning process and offer opportunities for knowledge acquisition also brings hope to universities use technology to improve their services. The aim of this paper is to measure the Egyptian student's perception toward the concept and benefits of m-learning through a survey of two hundreds and eighteen students at different colleges in Egypt. Data was collected and analyzed using SPSS.

Keywords: Mobile Learning, Distance Learning, E-Learning Student Survey, Mobile Technology.

1 Introduction

The rapid growth of information and communication technologies (ICT) and rising computer knowledge of the students make possible appearance of new educational forms. Nowadays extremely actual and perspective is mobile learning (m-Learning) [1][2][3].

2 Related Work

Al Fahd (2009) investigates the students' attitudes and perceptions towards the effectiveness of mobile learning at King Saud University through analyzing the answers to the qualitative questions in the surveys which an attempt to gain an understanding of how current students view the use of mobile devices in learning environments.[4] Naji Shukri and Abdul Razak (2011) investigate students' awareness and requirements of mobile learning services among Malaysian students in the higher education environment the results of the study show that students have enough knowledge and well awareness to use such technology in their education environment.[5]

The Study Purpose: The aim of this study is to determine how students in Egypt will accept mobile learning as an instructional medium. The research objectives are:

Ascertaining of students' acceptance level of mobile learning and Investigating possible factors which affecting mobile learning acceptance.

3 Methodology

To study the receptivity of students to the concept of mobile learning and its effectiveness a questionnaire was developed using ten closed questions to measure the acceptability of students to the perception of mobile learning and its effectiveness. The study was conducted in three educational institutions Sadat Academy for Management and Sciences (SAMS), computer and information systems department (CIS), Faculty of Commerce Transport College of International Transport and Logistics (CITL), Arab Academy for Sciences, Technology and Maritime at Alexandria, Egypt. (see Table.1) A sample of undergraduate male and female students (n=218), between the ages of 17 to -24 years they were asked to fill a questionnaire which measure the extent to accept students to the concept of mobile learning and its effectiveness The data collected was processed and statistically analyzed through SPSS Ver.17.

Table 1. Different Colleges Percentages

College	frequency	Percent
SAMS	74	%34
CITL	55	%25.2
CIS	89	%40.8
Total	218	%100.00

4 Results and Discussion

The data gathered from the respondents are presented in Table 2 which demonstrates the percentages of the descriptive statistics for the effectiveness and difficulties of mobile learning which measured by a Likert scale.

Data in Table 3 illustrates the mean and standard deviation. Mean scores of the sample indicate that the majority of the respondents preferred using the mobile technology in promotion of distance learning, also confirmed that mobile learning is a flexible method than traditional learning and can access easier to the sources of learning any time any where. Using Likert-type scales derive to calculate Cronbach's alpha. The generally agreed upon lower limit for Cronbach's alpha is 0.70 [6] which are regarded as acceptable reliability coefficients. The results of the reliability analysis presented that Effectiveness elements is 0.755 and the Difficulties of mobile learning is 0.703. Both are more than 0.7 so they are acceptable reliability coefficients.

Table 2. Descriptive Statistics for the Questionnaire Indicators

Item No.	Questionnaire Indicator	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Responded	Total
	Mobile Learning advantages							
1	Mobile Learning leads to easier access to sources	91 (41.8)	96 (44.0)	12 (5.5)	12 (5.5)	7 (3.2)	0 (0%)	218 (100%)
2	Mobile learning is an effective means of learning	54 (24.8%)	127 (58.3%)	21 (9.6%)	10 (4.6%)	6 (2.7%)	0 (0%)	218 (100%)
3	Mobile learning improves communication	51 (23.4%)	93 (42.7%)	21 (9.6%)	41 (18.8%)	12 (5.5%)	0 (0%)	218 (100%)
	Difficulties of the mobile learning							
4	Carrying laptops is an obstacle in the mobile learning	15 (6.9%)	59 (27.1%)	31 (14.2%)	89 (40.8%)	21 (9.6%)	3 (1.4%)	218 (100%)
5	Small screens phones and PDAs	23 (10.6%)	78 (35.5%)	43 (19.7%)	58 (26.6%)	13 (6.0%)	3 (1.4%)	218 (100%)

Table 3. Mean and Standard Deviation of the Questionnaire Indicators

Item No.	Questionnaire indicator	N		Mean	Std. Deviation
		Valid	Missing		
1	Mobile learning leads to easier access to sources of learning	218	0	4.16	.981
2	Mobile learning is an effective means of learning	218	0	3.98	.882
3	Mobile learning improves communication between students and teachers.	218	0	3.60	1.192
Difficulties of the mobile learning					
4	do you think carrying laptops is an obstacle in the mobile learning	215	3	2.80	1.152
5	Small screens phones and PDA	215	3	3.19	1.129

5 Conclusion

This study investigates the students' attitudes and perceptions of 218 University Student's from different colleges towards effectiveness of mobile learning in their studies. Also shows that the students agreed that mobile phones had successfully

enhanced the teaching and learning process. The analysis of the questionnaire leads to the fact that students is widely accepted the perception of mobile learning the students support the idea because it increases the flexibility of accessing to the resources and also can access information any time any where.

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