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# USE OF MOBILE TABLETS IN THE LEARNING ENVIRONMENT: PERSPECTIVE OF THE COMPUTER TEACHER CANDIDATES

Dr. Fatma Tansu Hocanin
Eastern Mediterranean University
Faculty of Education
Department of Computer and
Instructional Technology Teacher Education
Famagusta, N.CYPRUS, via Mersin 10 TURKEY
fatma.tansu@emu.edu.tr

Assoc. Prof. Dr. Ersun Iscioglu
Eastern Mediterranean University
Faculty of Education
Department of Computer and
Instructional Technology Teacher Education
Famagusta, N.CYPRUS, via Mersin 10 TURKEY
ersun.iscioglu@emu.edu.tr

### **Abstract**

With the evaluation and adaptability of next generation network environments on mobile devices, teaching and learning could be ubiquitous, location independent and personalized for mobile users. The rapid growth of such users will push educational institutions to rely on mobile technology in classroom activities. Mobile tablets are becoming popular in classrooms around the globe that many teachers see them as being a common accessory — as common as a pen or a pencil. Main purpose of the study is to investigate the opinions of computer teacher candidates to use of mobile tablets in the classroom. This study design as a qualitative research. Focus group interviews are used as data collection method. Data gathered as a result of the research is analyzed with descriptive analyses.

Key Words: Use mobile tablets in learning, Mobile technology, Mobile tablets in the learning environment.

#### **INTRODUCTION**

The next generation wireless network environments increasingly become integrated to support anywhere, anytime connectivity for various applications like multimedia, full-motion video and high data rates with appropriate quality of service (QoS). With the evaluation of next generation network environment, mobile learning through such environments proposes contemporary ways to support learning process over emerging mobile technology, such as mobile tablets, smartphones, personal digital assistants (PDAs), and much more. Thus, mobile learning allows students/teachers to access information and learning materials from anywhere and at anytime. Consequently, they have chance to control the time they want to learn and from which location they want to learn.

In addition, mobile technologies have introduced a new generation of educational tools that afford creative use and instant access to online resources in the learning environment. These issues will push educational institutions to rely on mobile technology in classroom activities. Mobile tablets are quickly becoming a popular and powerful educational tool for classrooms. One of the main benefits of mobile tablets is that they enable learning ubiquitous and location independent with a possible improvement in education efficiency and standards. The researches of numerous experiments with mobile tablets in learning environments have provided valuable data on the benefits of implementing such technology (Nagel, 2013); (Mehdipour and



May 2014, Volume: 4 Issue: 2 Article: 03 ISSN: 2146-7463



Zerehkafi, 2013). The usage of mobile tablets in the learning environment can yield many benefits for students in terms of improving their motivation, collaboration, creativity and developing IT skills. The overall learning experience can be improved through audio/video mediums; hence the use of mobile tablets in such environment helps them to learn in an interactive way. Moreover, mobile tablets are rich in sources of audio/visual tools, such as charts, graphs and images. With these visual elements, learning experience becomes more engaging and fun for the students that ultimately promote them to learn and develop (Rossing, Miller, Cecil and Stamper, 2012).

On the other hand, teachers can also benefit from the technology such as in classroom management and organization, student evaluation, visual quality of teaching materials and finding a unique teaching approach with the use of mobile tablets in classrooms. As learning is no longer just a linear process but one in which all information is connected seamlessly and visually with mobile tablets, they enhance the way of processing and presenting information. In addition, they provide inexpensive opportunities like continuous and situated learning support, potentially a more rewarding learning experience, and improving students' participation.

However, there are limited researches which are conducted on the acceptance of mobile tablets amongst teachers and are unsure of how to use them effectively. This is in fact a challenging issue why should technological innovations are accepted or rejected by its users.

#### **PURPOSE**

Main objective of this study is to analyse opinions of the 4th grade undergraduate students, whose studying Computer and Instructional Technology Teacher Education (CITE) program about the usage of Mobile tablets in the learning environment. Moreover, in this study, their opinions about the effect of using mobile tablets in learning environment (classroom) by teacher candidates on computer education are tried to analyse.

In order to achieve above mentioned general objective, below mentioned research questions are tried to resolve:

- a. According to the opinions of the 4<sup>th</sup> grade undergraduate students, whose studying Computer and Instructional Technology Teacher Education (CITE) program, what are the advantages of using mobile tablets in the classroom?
- b. According to the opinions of the 4<sup>th</sup> grade undergraduate students, whose studying Computer and Instructional Technology Teacher Education (CITE) program, what are the disadvantages of using mobile tablets in the classroom?
- c. What are general opinions of the 4<sup>th</sup> grade undergraduate students, whose studying Computer and Instructional Technology Teacher Education (CITE) program, about using mobile tablets in the classroom?

#### **METHODOLOGY**

The study was prepared as a qualitative research. Data in the study has been acquired by the method of focus group interview. In focus group interviews, 4<sup>th</sup> grade students whose studying Computer and Instructional Technology Teacher Education (CITE) program at Eastern Mediterranean University during the academic year of 2012-2013. 14 Male, 5 Female students out of 19 have been participated in the study. Interviews with students were made in 4 different groups. Interviews were recorded with tape recorder and afterwards they were analysed by transferring to computer environment. Each opinion and thought acquired by working group was analysed by researchers. Findings obtained as a result of this study were analysed through descriptive analysis method.



May 2014, Volume: 4 Issue: 2 Article: 03 ISSN: 2146-7463



### **FINDINGS**

The obtained findings through the study are presented in the parallel of research questions.

a. The advantages of using mobile tablets in computer teaching class, according to the opinion of 4<sup>th</sup> grade students of Computer and Instructional Technology Teacher Education (CITE) program.

As a result of the interviews conducted, it is identified that they believe use of mobile tablets by students for computer teaching in the learning environment provides many advantages. During the interviews, it is observed that students highlight the enrichment of course in material point of view and the ease of doing joint activities. The topic related opinions of some students are given below:

- "... Providing learning materials to students in the classroom will be easier. Each of us (students) will also be able to actively study to the related course materials outside of the course hours..."
- "... Finding many materials on the Internet is easy; hence, it is possible to use these materials actively in the classroom in addition to the materials which are prepared by us. ..."
  - "... Students can reach the course materials from anywhere and anytime..."
- "... As the mobile tablets can be carried easily, the communications of the students on the Internet will be easier... doing common activities together will become much easier ..."

As it can be understood from the above statements, it is determined that, the teacher candidates think that teaching environment will be enriched and also the Internet will make a positive impact on this situation. And also, according to students' feedbacks, it is observed that; when the flexibility provided to the students due the nature of mobile tablets is considered, they think the communication and joint studies/works will become easier in virtual environments. It can be said that, study findings support the work done by Daşdemir İ., Cengiz E., Uzoğlu M. and Bozdoğan A.E., (2012) and Pamuk, S., Çakır, R. Yılmaz H.B., Ergun M. and Ayas C. (2013).

b. The disadvantages of using mobile tablets in computer teaching class, according to the opinion of 4<sup>th</sup> grade students of Computer and Instructional Technology Teacher Education (CITE) program.

As a result of the interviews conducted, it is determined that; the teacher candidates think using mobile tablets in a learning environment will have some disadvantages in computer teaching. During interviews, it is identified that, the students think that the mobile tablets may cause especially dissolution of students' attention during the class, occurrence of health problems and may affect their communication process. The topic related opinions of some students are given below:

- "...Continuous use of mobile tablets in the classroom will prevent the course listening of students..."
- "... A student who is surfing the Internet with mobile tablet can get away from the subject which is explained in the class by visiting different web sites..."
- "...Continuous use of tablets may cause a number of problems especially in the eyes and hands of students..."
- "...The continuous communication of students that will be established with the use of mobile tablets will also affect the regular communication between them..."
- "...The students' communication between themselves or faculty members (instructors) may be adversely affected..."

From the statements above, it is understood that the teacher candidates think that using especially mobile tablets may cause dissolution of students' attention in the classroom, occurrence of health problems in the eyes and hands of students, and adverse effect to their social communications (between themselves or their teachers). The cause of these negative thoughts can be that teacher candidates have not yet been started to use mobile tablets in learning environments at an adequate rate. Thus, using such applications by teacher candidates' throughout their study will accelerate to find solutions to possible negatives during their professions. It can be said that, the study findings support the work done by Daşdemir et. al. (2012).



May 2014, Volume: 4 Issue: 2 Article: 03 ISSN: 2146-7463



# c. The general opinions of 4<sup>th</sup> grade students of Computer and Instructional Technology Teacher Education (CITE) program to use of mobile tablets in computer teaching/learning.

In the interviews conducted with students, it is identified that the general opinion of students on using mobile tablets in teaching is positive. It is determined that, with the use of mobile tablets, the students believe that there will be an increment in variety of teaching-learning methods and techniques, there will be improvements especially in the presented materials to students and also, an environment where today's students have easier access to their needs of qualifications will occur. The opinions of some students are given below:

- "...I believe that, there will be courses that offer more flexible and broader course contents with the use of mobile tablets..."
- "...both students and teachers will lead to process courses in different ways... In order to process courses with mobile tablets, the teachers will need to use different techniques..."
- "...with this way, the expected numeric qualifications of today's students can be reached more quickly ... all students can use internet and mobile technologies more effectively..."
- "...the opportunity to reach a variety of materials will be given especially to the students... Students can follow all course materials from anywhere that they want ..."
- "...if we would like to educate students for the world of tomorrow, we need to educate individuals who are extremely being dominant on today's technologies and who can the technology effectively. Thus, the use of mobile tablet in the learning environments is very important.... I believe that, the internet and mobile technologies would have beneficial effects in learning process, especially in computer teaching...."

As it can be seen from the above opinions, the students have positive opinions on using mobile technologies (tablets) in the learning process. During interviews, it is observed that students think some problems may arise in the development of material which is especially compatible with mobile technologies. Regarding with this issue, one of the students stated the following expression:

"... The materials that are used in lectures will become more compatible with mobile technologies. This will force especially the material production. But; after a period of time, it can represent many materials to students ...."

As it can be understood from the above expressions, it is observed that students think some problems may occur especially in the development of material. It is thought that the designated subject by students is extremely appropriate. It is thought that, material development (especially compatible with mobile technologies) is one of the extremely sensitive steps which is needed to focus on and to be planned at the first place for effectiveness of the learning environments.

### **CONCLUSION**

In recent years, it is seen that interest towards mobile tablets are increasing both in our country and all around the world. In this sense, it is inevitable to experience the penetration of this kind of Technologies into the learning/teaching environment. In particular, in terms of frequent usage of mobile tablets in the environment of learning/teaching, it is believed that receiving opinion of teachers who are one of important actors of learning environment and candidate teachers who are expected to use this Technologies effectively is extremely important.

In this study, opinions of 4<sup>th</sup> grade students, whose studying Computer and Instructional Technology Teacher Education (CITE) program, about using mobile tablets in the learning environment have been analysed. Opinions of the students about usage of mobile tablets within learning environment have been assessed as an advantage, disadvantage and general opinions. As a result of the study, it was determined that students consider the advantages of using mobile tablets within learning environment as enriching lesson in terms of material and facilitating execution of common lessons. According to the students, disadvantages to be created by using mobile tablets within learning environment are distracting students in the course of lesson due to the usage of mobile tablets and causing health problems and affecting communication processes. As a result of the study, it was determined that general opinions of students related to usage of mobile tables are generally



May 2014, Volume: 4 Issue: 2 Article: 03 ISSN: 2146-7463



positive. It was detected that according to the students' belief, varieties of learning-teaching method and techniques will increase by means of mobile tablets, material submitted to the students will especially improve and an environment will be established in which the sufficiency required by present necessities of students will be easily achieved.

This study was planned as a qualitative research. It is believed that similar studies and testing bigger participant groups experimentally will set light to determine possible problems in this kind of new applications in advance and constitute more efficient applications by resolving problems.

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