# Perception of Students toward Using Tablet Computers/Smartphones in Education: The Case of Eastern Mediterranean University

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**ABSTRACT** 

The very first time when mobile technologies were attempted to be used in education

goes back to mid- 1990s. Like any other ICT device, tablet mobile devices have their

own advantages and disadvantages which may either create or eliminate some

limitations possibly arising due to environmental factors or teachers'/students'

readiness.

In this study, an investigation of findings about the advantages of m-learning is carried

out. At first, the recognition to which devices, (tablet computers/smart phones) are for

using in curriculum context, then the technologies which can be used as a tool, the

advantages of each tool, different ideas regarding their usage for educational purposes

and finally, the key factors which have impact on higher education to use mobile

devices in m-learning were examined. Students' perception of using mobile tablet

devices for educational purposes and the freedom of entering the classroom with

mobile tablets were discussed. In addition, its effect on students' learning, differences

between male and female students were detailed, attitude toward using mobile tablets

in their daily life and the effect of owning mobile tablets in education in contrast to

other mobile devices were also discussed. Moreover, some recommendations on

utilizing what kind of technology and how to use mobile tablets as an educational tool

were offered.

**Keywords:** Learning, M-Education, mobile devices, m-Learning in education, Mobile

tablets.

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ÖZ

Mobil teknolojinin eğitimde kullanılması, ilk kez 1990'lı yılların ortalarında

gerçekleşmiştir. Her Bilgi ve İletişim Teknoloji aracı gibi, tabletler de çevresel

faktörler ya da öğrenci/öğretmen çabukluğundan kaynaklanan bazı sınırlamalara

neden olmakta veya var olan bazı kısıtlamaları ortadan kaldıran avantajlara sahip

olmaktadır.

Bu çalışmada, m-öğrenmenin avantajları ile ilgili bulgular incelenmiştir. İlk olarak,

teknolojik araçların, özellikle tablet ve akıllı telefonların, eğitim müfredatı

çerçevesinde kullanılabilmesi, bir araç olarak kullanılabilecek olan teknolojiler, her bir

aracın avantajı ve son olarak mobil araçların m-eğitimde kullanılabilmesi için sunulan

başlıca etkenler incelenmiştir. Öğrencilerin, eğitim için tablet kullanabilmesi ve sınıfa

tablet ile girilebilmesi konuları ile ilgili nasıl bir bakış açısına sahip oldukları

tartışılmıştır. Buna ek olarak, hem tablet kullanımının öğrencilerin öğrenimi

üzerindeki etkileri, hem de erkek ve kız öğrenciler arasındaki farklar detaylı bir şekilde

anlatılmış, günlük yaşamda tabletlerin kullanımı konusu masaya yatırılmış ve

eğitimde, tablet kullanımının, diğer mobil cihazlara kıyasla nasıl bir etkisi olduğu

tartışılmıştır. Buna ilaveten, tabletlerin eğitimsel araçlar olarak nasıl kullanılabileceği

ve nasıl bir teknolojiden faydalanılabileceği konusunda bazı öneriler sunulmuştur.

Anahtar Kelimeler: Öğrenme, M-Öğrenme, mobil cihazlar, eğitimde M-öğrenme,

tablet.

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# **DEDICATION**

I devote my exposition work to my brilliant beautiful family and companions. My most extreme appreciation goes my adoring guardians, Mr. and Mrs. Adibfar who's their inspirational statements has truly enlivened me to push ahead in spite of the difficulties experienced along the way.

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## Chapter 1

### INTRODUCTION

#### 1.1 Background of Mobile Learning

Nowadays, life is going to be modern on every aspect. Over the last decade use of technology was running so fast and affected our lives even education. Consequently, mobile technology figures prominently in the future of higher education, particularly in its integration into teaching and learning. Mobile tablets burst onto the market with the release of the first Apple iPad in March 2010. The growing use of mobile technology at colleges and universities is the most current trend forcing educators to evaluate the merits and limitations of a new technology.

M-Learning (mobile learning) is the form of using any application or device which can be easily carry (N. Pachler, et. al. 2010). Cellphone, tablet, laptop, can be used as the term of m-Learning (Joseph Rene Corbeil et. al. 2007). Although they have their own advantages and disadvantages, they can still be used as an educational tool inside or outside classes to help better understanding. On m-Learning, applications can be the most popular ones, an easy and accessible tool for the education purposes. For instance, some language learning apps are the popular apps for learning foreign languages. To construct a fixed meaning for m-Learning is untenable, as m-Learning is the summation of multiple concepts. Likewise, talk on new advancements regularly includes an extensive variety of employments and capacities. The catchphrases a

variety of terms and preparatory determinations that present a "mobile learning, m-Learning, hypermedia-assisted learning, ubiquitous computing, mobile instruction technologies, handheld learning and e-learning" speak to just an example of terms that differently point towards related capacities and ideas. Also, quick advances innovation outmode beforehand built definitions and applied structures.

Using mobile tablets in learning might likewise be as m-Learning that made conceivable in a manner that learners spend together is restricted. However as an aftereffect of innovation use in training, students can access instructor's course materials. In this way, student's ventures are submitted at quicker rates and with ideal precision.

Mobile tablets have been assuming a fundamental part in the public arena today since it is utilized to allude to union of varying media. The most widely recognized asset shared today is association with the Internet. Information Communication Technology (ICT) has an effect in practically every part of our lives today, from attempting to mingling, to figuring out how to play. Some individuals don't trust versatile tablets expect a fundamental part in direction. ICT have been playing a huge and positive effect in training. It is utilized as a part of instruction as far as online networking abilities, the mindful utilization of web and support. A school could be characterized as a position of learning that information are affected peoples life. With the perpetually expanding interests for information, the innovation helps with the learning of the people with the utilization of innovation.

The digital students' age has truly changed the way of communication, networking, access information and learning. Youths are currently the most populated ones on the web today and they get to the web through different qualities means, for example, a PC, TV, and cellular telephones. Mobile tablet devices enhance learning and better teaching technique for the teacher. As technologic innovation is turning out to be increasingly installed in our way of life now.

A few nations have incorporated ICT into their framework and have been utilizing it viable which helps as a part of the instructing and the learning viewpoints while in different nations, schools or foundations have recently begun then again are again still to execute the utilize of versatile tablets in device. Information communication technology had conveying implementing into preparation that admit the educators and the understudies more chances to certify the absorbing and instructing to personal requirements. ICT can likewise allude to the utilization of PC and web associations used to handle and convey data for educating (Fisseha Mikre, 2011). Utilizing mobile tablets as a part of training has empowered the customized absorbing method for understudies by giving the test needed to make learners to stay attract and enable them to accomplish their objective. ICT has brought such a variety of differences in which way the addresses educate and in which way the students realize which can be as an unmeasurable for the educator's results. This plans and achieve instructive exercises, correspondence between students, instructors, and group. Instructors can make intuitive classes and make the training more helpful and fulfillment, which could enhance student nearness and make the emphasis on the consideration. Instructors can likewise effortlessly clarify a composite guideline and guarantee students' understanding. Additionally, give them more noteworthy approach to enhance

scholastic reporting, information can be dissected like an accomplishment of the students and instructors, evaluating of the student execution.

#### 1.2 Use of Mobile Tablets in Education

Mobile tablets are additionally utilized as a part of instruction to regulate and control the educational systems for both students and every one of the specialists in the school. Mobile tablets is likewise utilized as a part of instruction as e-Learning which is a sort of online electronic realizing where understudies don't have to physically go to locations or classes yet are interface with their lessons through the utilizing web, intranet or extranet (John Traxler, 2015). Moreover they are additionally utilized as part of schools to keep the data and records of the students furthermore the participation records. ICT can be utilized as a part of schools to reduce the educator's workload, for instance when students present their assignments to the instructors and the educators can utilize the PC to assess the student's task e.g. checking of the shading sheet.

Mobile tablets upgrades social abilities whereby students can convey to each other particularly for those that are modest, it helps them to impart in a more advantageous environment like a visiting room, gathering, and dialog gathering et cetera. Utilizing mobile tablets as a part of instruction empowers educators to effectively utilize pictures to instruct and enhance the retentive memory of students.

ICT assumes a noteworthy part in helping the students to learn better, at that point it is believed that the usefulness of mobile tablets has an impact on the interest and estimation of the utilization of it among the students. The more the students turn out to be more acquainted with the mobile tablets, the more the potential for the instructive

use turn out to be more they need to learn. Because of a few students who are debilitated or experience issues with composing, perusing etc., the utilization of mobile tablets bolster them more. For instance, the students who are not capable or who think that it's hard to compose.

Portable tablets helps the understudies to absorb further and speedier, that it gives understudies whom cognitive issues with enlightening entertainments to goad the understudies to interface by absorbing. It aids understudies to have view of working up their lessons, increment fresh mental aptitudes and having them free foe absorbing. It assists on better correspondence among the understudies, the educators. Also, portable tablets helps the understudies to store or recover data. For instance, when a student completes his or her anticipate, the undertaking can be saved money on internal drive with massive stockpiling, which makes the student to likewise reinforcement their documents to recover data back. students likewise utilize some arrangement of programming in a portion of their school work, for instance, students who have a great deal to compose, rather than composing such a great amount on paper, mobile tablets gives and an option way utilizing pad tools to sort which likewise can revise the misspelling of the words typed. Mobile tablets additionally assists the student to absorb further utilizing video conferencing, this may be on account of separation absorbing whereby the understudies could do video conferencing by instructors to absorb and examine era eye to eye on video conferencing.

#### 1.2.1 Challenges

However, mobile tablet as a part of training assumes an exceptionally noteworthy part in instruction yet at the same time, there are some difficulties in a few perspectives. The expense of the hardware can be a test while building up the utilization of mobile tablets in instruction. Now and then it is hard for the instructors to educate with mobile tablets because of the absence of preparing. In some cases they may resist to change the way of teaching and may say they could get the best results over the decades by using traditional way of teaching by using non technological tools. On the off chance that an instructor does not have an affair of the product and he needs to educate the students with the product, it is highly unlikely that both educator and student will pick up anything in the movement. A few students don't have the certainty when taking up with their kindred students or with the instructors, they utilize either online chatroom to convey thus on yet it is not a smart thought for the students to remain unconfident so utilizing mobile tablets along these lines is a piece of test student can confront when learning.

#### 1.2.2 The Future Role of Mobile Tablets in Education

ICT has presented or has made workable for students to utilize the mobile tablets for perusing. For instance, the students who read e-books will need to retreat to libraries to begin perusing a tremendous measure of books on paper if mobile tablets no more exists in training. Students need to back to the customary way however putting away books in a library. Likewise, if there are no mobile tablets in training, there will be no correspondence between the students any longer. For instance, students won't have the capacity to visit with different understudies or instructors online any longer, they would need to face themselves corporeal, there wouldn't be online dialog bunch, instructors won't have the capacity to send materials online for understudies to utilize, understudies who have not trust in taking up with other students can't communicate online if there isn't talk place or examination bunch on the web. Also, instructors will

need to backpedal to writing slate if no digital or savvy board in learning environments. It's not a smart thought at all to end the utilization of ICT in education.

#### 1.3 Problem Statement

Traditional ways of learning can make limitations for students. Some students living in far distances from learning institutes and they need to spend more money rather than the local students.

Eastern Mediterranean University students in North Cyprus were from different countries and they had to come to the place for learning for many years. Using mobile tablets outside or inside the university might be helpful for EMU students.

#### 1.4 Purpose of the Study

The aim of this study was placed to identify the potential and students' readiness for learning through mobile devices, finding different factors such as age, gender, CGPA and year of study that could affect their decision for using mobile tablets.

## 1.5 Research Questions

This proposition talks about the parts of ICTs, the guarantees, and key difficulties of coordination of mobile tablets into instruction frameworks, the survey endeavors in noting the accompanying inquiries:

- 1. What is the perception of EMU students towards the use of mobile tablets in their learning?
- 2. Is there any significance difference of the mobile tablet usage in learning according to EMU students' gender, age, year of study and CGPA?
- 3. Is there any relation between students' learning and mobile tablet usage?
- 4. What are the challenges for using mobile tablets in EMU?

## 1.6 Limitations of the Study

The limitations of the study were the population of the Eastern Mediterranean University, which was over 16000, but there was only some few ICT students and researcher had to choose the participants among graduated and understudies from different departments so the contributors of the study were convenience population in the university.

#### 1.7 Definition of Terms

**Education:** It might been viewed as a procedure of whereby a kid or a grown-up increases learning, aptitudes, great mentalities, experience.

**Information and Communication Technology:** It is the blend of mechanical instruments and assets utilized to convey, scatter, reserve and oversee data

**Distance learning:** Distance training is a method for gaining far from the school where students don't learn in up close and personal with the teacher.

**Online learning:** It may observed as a sort of acquisition utilizing the web and PC to absorbing.

**Learning systems:** absorbing frameworks are programming apps used to actualize a learning procedure.

**Mobile devices:** A handheld processing gadget has a working framework (OS), and can run different sorts of utilization programming, known as applications

**Tablet computers:** A tablet PC, ordinarily abbreviated to a tablet, is a versatile PC with a touchscreen presentation, hardware, and battery in a solitary gadget.

# **Chapter 2**

#### LITERATURE REVIEW

Many researches has done to evaluate the new ways of learning and teaching. Technology had an important role as an educational tool and understudies. Many points such as characterizing the foundation of concentrating on methodologies, study conduct, capacities acquisition, issues influencing the learners' motivation, few establishments questioning about livelihood of distance education.

Technologies particularly the communication tools, furnishes instructors, and students with such a large number of fascinating devices which might be utilized to progress the educating and acquisitioning procedure. This device cases to help the educators to have more favorable position of utilizing technology as a part of instructing furthermore patronage the understudies to absorb better and speedier.

## 2.1 Mobile Learning

John T.E Richardson (2006) in his research, analyzes the demographic elements, assessments and conduct. He likewise assesses the outcome which he for the most part researches the association amongst conclusions and study conduct. The results bolster the feeling that the distinctions in learning conduct prompts contrasts in that the schools are affirmed. This reasons straights consequences for the way in that understudies study.

Qinglong Zhan & Lin Zhang (2011,) in their study went for characterizing foundation of concentrating on methodologies, research conduct, learning capacities, training result, and acquisition improvement. Moreover, evaluation on separation instruction is yet feeble. None is sufficient still on demonstrating learner's individuality and imagination in separation training.

Richard E. West (2011) did an examination, over the impacts of separation instruction of the instructors and understudies execution. There are a few problems influencing the students' motivation in separation training which is the self-coordinated (autonomous) absorbing. Understudies would recognize and arrange the point of their absorbing, instructional plan and place exertion when they self-oversee. At the point when understudies self-checking their job however, they recognize and oversee their inside discerning procedures.

As indicated by Carig Locatis et al (2011), led examination and they prescribe that nearness of sensation can totally modify the learning impacts and the learner's satisfaction. Their exploration assesses these outcomes and instructing and innovation use in separation training. The innovation utilized is video meeting webcast. The creators distinguished that the vibe of nearness is the most extreme when learners are as one physically and its best in class with video-conferencing subsequent to the correspondence is more symphonic when imparting eye to eye. They likewise recommended that the results of learning, evaluations of training and innovation will be ideal with more prominent degrees of nearness. All things considered, in separation instruction, the training's execution is better when correspondence between the instructors and the understudies are two routes either using mobile.

Stressed their research with few establishments as yet to the livelihood of separation training because of some intemperate issues, for example, capital, availability, Department concerns, state requests, and scholastic hierarchical activities. Among a few schools, costs defer the improvement the most. The more separation learning conveyance frameworks get to be mind boggling and excessive, the more the learning gets to be difficult to reach to bottom-wage levels of community.

Mahnaz Fatemi Aqda et al. (2011) analyzed the impact of separation absorbing, about constructivism and subjective, on the understudy's imagination. They backing the feeling that specific necessities should be meet with a specific end goal to be fruitful in separation learning, similar to some positive instructive configuration approaches, correspondences, and capacities, that is appropriate for that particular elements of separation learning courses and projects. Moreover, a theoretical instructive arrangement base is likewise significant. Keeping in mind the end goal to procure an operational preparing in separation learning.

M. Oteng-Ababio (2011), in his outcome uncovered understudies would have idealistic sentiment of the value, satisfaction and adaptability of electric absorbing stage, however face terrible methodology as respects to inspection relevant problems. These are basically sourced by elements, for example, unwell conveyed and unwell reexamined units and unwell arranged inspection arranges. The examination adulates the vocation of electronic parleyed offices as one of the significant strategies for building the expectations of separation taking in a reality.

Hasan Karal et al. (2011) attempted to characterize the view of understudies taking synchronous separation training classes by the method for video conferencing in

separation learning courses. They utilized a subjective exploration approach, a scale examining, a subjective examination technique and the information got depended on semi-organized meetings and perception outcomes. From the outcomes, it was plainly unmistakable that the understudies' impression of the lessons converted amid and toward the finish of the term. They found students who had no satisfactory objects before joining in the online addresses however that for the time of the advanced lessons, understudy discernment converted and they got an all the more explixcit thought regarding the open doors that an offbeat separation training can give them. They pinpointed the most critical issue in synchronous separation instruction to be the association and sound issues. Moreover, they began getting exhausted obviously because of the restricted camera points. It was additionally suggested that these slowed down the consistent quality of the courses which prompts interference. Other specialized challenges expressed, for example, teacher, environment, separation, lesson sort and span were connected with the issues. Therefore, they concocted a few arrangements: Firstly, to propose an introduction past to enlistment, for it to annihilate learners' preferences and disarrays before the lessons begin. it might likewise be conceivable to minimize issues, for example, screen solidifies soften up the sound, reverberation, and the eye contact issue coming about because of low screen determination by having a professional present out yonder learning classroom. Separation training educators ought to pick the instructive strategies and methods in which they can dynamic the understudies. Additionally, understudies ought to have the chance to meet the educator outside the course hours keeping in mind the end goal to pose each query and visit with the instructor.

Ilker Yengin et al. (2011) at a study, wrote their observation is that full comprehension of the utilization of innovation developments in separation absorbing and their differing components can backing to accomplish a superior result. They recommend that it is key to know about the advantages of innovation contrasting together. Thus, they make correspondence media examination researches to find every advantage so to bolster in accelerating the procedure of settling on decisions at "which innovation is best?" comparative modifications for separation learning are essential to characterize these issues for it settle on the choice methodology compelling independent of the capacities to make blunders. So to kill any deficiency in this correction, five of the highest essential blunders researchers made in composing and pondering separation training research in innovation or media studies are solid minded. The study wounds to help the people responsible for strategy making of separation learning, separation training researchers and instructors by edifying them the reasonable blunders interestingly concentrates in order to bolster in settling on their choices more flawless when utilizing separation learning arrangements in their foundations.

Dayanand Thangada (2010), in his paper, point at distinguishing the components affecting separation training. These are the central part discouraging variables he set up. Separation workforce capacities, lack of discharge time, and nonattendance of staff instructing and extent of classs. The measure of time expend for the lessons advancement did eclipse and discredited the measure of time that can be devoted to inquiring about. He likewise contended that his principle problems emerge by not having adequate data on separation instruction advancements and the nonattendance of educating for the offices. Moreover, he proposed that reasonable

preparing introduced to resources, site engineers, bolster masters and directors. It is extremely imperative to have a specific improvement authentication for separation learning.

Vitalicy Chifwepa (2008) in his study, he brings up developing extension and an affirmation rate of separation instruction and focused on the way that students perform established methodologies than ICT based setups of the term assets. He likewise mentioned that understudies trust that information communication technologies will build up their acquisition procedure. The understudies consider ICT to be a fundamental instrument that support their corrections. By the by, the students mentioned they won't just utilize the web as their lone wellspring of materials aside from if the entrance to ICTs is unmistakable.

Jale Balaban Sali (2008) in her research, discussed the need of the planning direction, and the need to suspect the educational guidelines necessities of understudies and hence creating useful learning frameworks subsequently. The predominant educational configuration models emerged because of unavoidability. The motivational configuration model set out those educating techniques that should be sorted out with the methodologies, which will enhance the consideration, importance, certainty and delight of learners, thus, protecting the dauntlessness of the learning yearning and motivation. They concentrate additionally talk about the plans that are delivered because of the uncovered arrangements that enhance the center of the learners amid the learning procedure, rising a criticalness to the learners' craving, assembling and empowering suspicion for accomplishment and backing having a satisfaction by strengthen achievement. The concentrate really abridges the down to earth

comprehension of studies related with this subject and the reference in plotting agent rousing instructive plans in separation training.

Dale A. Harris and Chuk Krousgrill (2008) looked at the advancements utilized as a part of separation learning furthermore the impacts of change required to facilitate the most basic improvement in this field. Besides, the creators broke down the notable entries of innovation. By and by, they said that innovation empowered efficiency upgrades in separation instruction have not yet showed up nor has the academic varieties been insignificant. The genuine truth is that advanced education learners, all inclusive, select into separation classrooms since it absorbing could be available anytime anywhere.

ICT had performed tasks simpler in training; ICTs engage teachers and understudies, making essential commitments to learning and accomplishment in foundations. Understudies can now contemplate in their own helpful time and at an advantageous spot. Separation learning has made a considerable measure of adaptability in foundations today, understudies can now perform their school work at any area gave there are PC and web access association. Moreover, it empowers understudies to work at anyplace they are helpful without sitting in a planned classroom. Despite the fact that regardless it has a few constraints influencing the understudy's inspiration, for example, the self-coordinated training which makes the understudy absolutely autonomous and for all time separate from the educator.

Additionally in separation instruction, the learning results and the execution of understudies are higher when the understudies convey in two-path with the educators using ICT devices, for example, video conferencing, phones and so on.

Separation training makes work much simpler for the understudies to accomplish their project on the grounds that the time when the classes or addresses can be finished are exceptionally adaptable, the understudy can take a shot at their own particular whenever rather than the anxiety to go to a planned classroom on the grounds. Despite the fact that there is much obligation regarding the understudies as the work is adaptable. Understudies are required to work fine freely without direction and observing. This applies to understudies who are not self-propelled and understudies who are in geologically remote ranges who might not have admittance to instructive open doors in their neighborhood establishments.

Separation instruction is something that establishments ought not to stay away from particularly for understudies who are extremely distant from the school. Albeit some specific prerequisites should be expert for separation training to stand legitimately, for example, the instructional configuration arrangements, correspondences, and capacities gratefully proper for specific components of the term plan and utmost essential the ICT devices, for example, web, course site, radio and so on.

#### 2.2 Online Mobile Learning

In a research titled "Distance Education", specified that the understudies choosing course materials online necessary to learn whether the content substance conveyed online justified, despite all the trouble likewise if online absorbing is a dependable strategy for absorbing (Simonson, 2003). For the understudy's necessity to be fulfilled, the specialist utilized an amazing review. Their outcomes uncovered that online absorbing is as agent traditional way (eye to eye absorbing) and different understudies

were unsurprising to begin using the online contents. This demonstrated that the improvement of separation training is unavoidable.

Other researchers specified in their research to find out at the web taking in environment of the educator and the understudies' perspective (Boling, et. al2011). The specialists utilized the subjective exploration strategy and they went for the growth the business of agent internet absorbing rehearses. They concentrated on the impediments and patrons of the substance of the terms conveyed and the informative strategy, as characterized by understudies and teachers in internet absorbing approach. They additionally utilize intellectual preparing perfect for it to claim their information examination. Their discoveries demonstrated the mindfulness for the address change and teaching methods and also proposing open doors for other study.

Paul Bradley (2011), in his study, shows that the advancement in the acceptances to internet absorbing over the instruction parts. This sponsorships the creating understanding about the value of separation training proving that they have gotten to the measures of old-style instruction.

Online learning will be taking in a procedure which contrasts from the conventional learning environment by connecting with numerous learning assets (Çalışkan, 2002). Scientists contend that the consequence of the effect on the absorbing setting furnished by data correspondence innovation (Chang, 2003; Jegede, Fraser, and Fisher, 1998; Taylor and Maor, 2000). Walker and Fraser (2005) characterized that as a mix of separation absorbing and electronic absorbing setting that containing learning exercises did in the online setting totally. Web absorbing situations, instruction, and

preparing are acknowledged with the utilization of data and correspondence advances in light of the web (Pearson and Trinidad, 2005).

Innovation now makes instruction a great deal more pliable these days. Data and Communication Technology devices had making school homework much less demanding for the understudies. Online training makes utilization of this ICT apparatuses, for example, PC, web etc. Understudies no more should be in learning environments formerly students being able to get addresses. Absorbing is finish online at any area as yet the understudies are associated with the web with their PCs.

Web absorbing is imperative at school by its adaptability and the sort of coordinated effort of jobs among the understudies. This cooperation apparatuses (online dialog bunch, discussions etc.)Provides the understudies to share sees among themselves likewise build their comprehension around a subject or job. In web taking in, the educators are accessible and welcoming, understudies have entry to the lesson contents online in all day, every day, understudies can pick up their web and PC abilities.

Institutions ought not to evade the successful utilization of this ICT apparatuses (web association, PCs, internet learning instruments and so forth.) in their surroundings in spite of the fact that the expense of building up and keeping up it can challenge.

#### 2.3 Related Studies

As indicated by the outcomes acquired from the understudies who took an interest in the review, it is presumed that connection with the instructor is the best variable. Furthermore, these variable other compelling elements were found as takes after; internet taking a part level of the understudies, connection by implicit cohorts, their cases to choose online courses, fulfillment situation from bearing administrations and diminishing potential issues. Contrasts in variables, for example, sexual orientation and age were controlled by the analyst. Learning fulfillment of ladies in age scope of 35-46 is higher than the rest as indicated by the outcomes. Lim (2001) arranged a survey as exploration worldview which was comprising of four sections to 235 members from Florida Atlantic University, John Hopkins University, Florida International University, the University of Houston and Rio Salado College keeping in mind the end goal to quantify age, sex, Computer Self-viability, scholastic self-idea, instruction level, number of years of PC utilization, recurrence of utilization of PCs, PC preparing, Internet involvement in the classroom, investment in electronic separation learning workshops, the impact of the variable fulfillment and understudies' aim to take part in online courses later on. As indicated by the consequences of the study, it was derived that PC self-viability affects fulfillment. Besides, understudies were observed to be satisfied with online lessons and planned to choose more courses in comer.

Arbaugh (2001) has directed a study by concerning the significance of instructor's inclass conduct, as it were carrying on thoughtfully to understudies for absorbing and fulfillment of the understudies. He did a research in courses led by Lotus Learning Space or Blackboard programming by 14 unique educators and directed a review created by Alavi (1994) by 390 understudies taking care of 25 diverse networks graded MBA field including 1999 Summer Term and 2001 Spring Term in University of Wisconsin-Oshkosh. The study uncovered that likewise verbalized and non-verbalized thoughtful conduct to diminishing the social separation amongst instructors and understudies and understudies' disposition to the gadget/programming that gives

lessons have the impact on understudy fulfillment. Swan (2001) led an exploration of inspecting elements which have the impact on understudy fulfillment and taking in saw from non-synchronous absorbing. The study has been exhibited online to 3800 people enlisted to and finished 264 distinctive online lessons by means of SUNY Learning Network (SLN) in 1999 Spring Term.

As per the review carried out, 1406 understudies reacted and it's resolved that lucidity of outline, collaboration by the showing partners and consideration stage by the orderlies are the components that have an impact on understudy fulfillment. Thurmond et al., (2002) have analyzed the impacts of ecological variables on understudy fulfillment while controlling the understudies qualities in electronic courses with 120 members utilizing Input-Environment-Outcome Model (I-E-O) created by Astin (1993). As indicated by the outcomes acquired, online stage effects understudy fulfillment. It was additionally discovered that the utmost imperative variable on this an impact is giving criticism on time. Leong et al., (2002) have directed a study to inspect the viewpoints basic understudy fulfillment and discovered how to utilize those perspectives to conjecture the levels of understudy fulfillment. Connections between a few variables have likewise been analyzed. Specialists of this study comprised of the understudies who enlisted to 29 electronic courses in University of Hawaii, Hawaii Pacific University, Baker College, Michigan and Nova Southeastern University in 2000 Fall Semester. The review was made on the premise of 8 unique angles and scale made out of 47 Likert Scale was utilized as a part of the request to gather the information. The review has been conveyed to 508 understudies enrolled to 29 online courses and the input was taken from 128 people. It is said that communication,

educator, workload/hardship and innovation are the viewpoints fundamental understudy fulfillment.

Researcher has likewise made proposals, for example, giving a criticism on time to expand fulfillment, and making educators more accessible on the premise of the information got. Rivera and Rice (2002) have made correlations of three distinctive class stages, which are vis-à-vis, electronic and coeducation stages. Toward the end of this study, they have thought about understudy execution, understudy fulfillment, and instructor encounters. The information was gathered from various class stages with numerous decision inquiries and specialists comprising of youth. It was found that the stage with the most minimal fulfillment level was the online instruction stage; Rivera and Rice have indicated the reasons of this circumstance as the deficient bolster, access issues and understudies' absence of Internet use. They have additionally ordered what ought to be done to expand fulfillment on online training: (a) Teaching arrangement and strategy for the lesson ought to be communicated unmistakably before equipment, programming, and other essential enlistments. (b) Flexible and flaw tolerant stages ought to be favored keeping in mind the end goal to transmit the lesson content. (c)More backing ought to be accommodated both understudies and instructors. (d) Provision of quick and strong web Arbaugh and Duray (2002) discovered that having swarmed classes have a negative effect on fulfillment influences fulfillment, through, the adaptability of gadgets have the positive effect in the especially of electronic MBA programs. Another outcome got was that who were understudies skilled in online training were more satisfied with the absorbing gadget. Learning and fulfillment impression of the understudies have been talked about with Arbaugh and Duray's (2002) research and two distinctive online MBA applications. Two specimens have

been picked by the researchers and classified them as A and B separately. Test An is chosen of 6 class stages utilizing Lotus Learning Space as a part of US University in 1999 Academic Year; B is chosen through online classes given by Western University in 1999 Spring Term. As an aftereffect of the information acquired, the researcher discovered that having swarmed class's effects affects fulfillment through adaptability of gadgets being utilized has beneficial outcomes. Another outcome got was that accomplished understudies in online instruction were more satisfied with the learning gadget.

Blossom and Hough (2003) have broken down that level of fulfillment of the understudies who are concentrating on nursing, wellbeing sciences understudies and innovation upheld training. Review which utilized was comprising with 36 articles and 3 open-finished inquiries honed by researchers. The information was gathered from 375 people inside 2 months. The study uncovered there is a relationship among utilized innovation and primary variables of fulfillment. As indicated by the investigation results made by authorities, it was resolved that determination and utilizing of this innovation are the primary elements of fulfillment.

Debourgh (2003) expressed that fulfillment of the understudies who were concentrating on a four-year college education of nursing by means of intuitive video gathering and the Internet (www) with his study. He acquired the information by utilizing a 59 point fulfillment review from 43 attendants. In this fulfillment review, learners and instructing were the two fundamental perspectives that were centered around. Besides, sub-measurements identified with learners have been resolved. Those were encounters identified with innovation classes, innovation adequacy, in-class use

of innovation, age and gathering extent. Instructive sub-measurements are educator/educating, innovation and less on administration. As per the information results acquired from information examination, it is presumed that understudy fulfillment and the educators have an exceptionally solid connection.

Richardson and Swan (2003), analyzed the part of civic readiness in online training stages in their research. The information has been gathered with an overview after online training classes had been finished in 2000's spring semester at Empire State College. Information hasn't been gotten over the individuals who didn't finish the course despite the fact that they had been enlisted to classes. The information has been acquired utilizing the study created and redesigned with a few techniques by Gunawardena and Zittle. The review comprises of Likert sort questions, data of orderlies, class exercises and open-finished inquiries. It has been acquired that understudies' view of social readiness were high, similar to the fulfillment and taking in quality saw from the instructors'.

Benke et al., (2004) have shown that availability, nature of training, instructive, specialized and managerial backing is a portion of the variables that affect fulfillment. Researchers accepted the cost, the effectiveness of learning, fulfillment of availability and teacher as four noteworthy points in their own examination.

Bolliger and Martindale (2004) have directed an exploration to look at the variables which have an impact on understudy fulfillment in online classes and determine the fulfillment level contrasts between two gatherings. They have accumulated the components that have an impact on learner fulfillment in online classes utilizing 42 point review performed on 105 online learners in their study. The elements were

educator variables, specialized subjects, and communication. Drennan et al., (2005) have indicated the components that affect understudy fulfillment and adaptable web learning. A study, which accepts two distinctive understudy capabilities, has been completed utilizing a model created.

# Chapter 3

### **METHODOLOGY**

This chapter talks about the parts of mobile tablets, the guarantees, and key difficulties of coordination of ICT into instruction frameworks, the survey endeavors in noting the accompanying inquiries.

#### 3.1 Research Method

For this study methodology that had been used was a quantitative research was utilized. A survey was directed to the sample from an unintentional students distinguished by the Eastern Mediterranean University. Quantitative technique means to gauge the issue by creating factual data or the information that can be changed over into useful insights. The survey is being used "to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context." (Isaac & Michael, 1997, p. 136) The term 'survey' in research is generally put in application for a methodology designed to rollup information over a specific people, or a example, and traditionally in a study, Robson utilizes polls or a meeting as the review apparatus. Besides, surveys are utilized to gather information from people for them, their families, or about bigger association gathering, for example, schools, workplaces. Sample surveys are the critical instrument for social affair and dissecting information from the chose people.

In this manner as quantitative exploration method was essentially about gathering numerical information to explain an exact wonder; the particular inquiries appear to be addressed instantly utilizing the quantitative examination method.

For as long as a very long while, the act of activity research has been a genuinely basic made of examination in instructive research, particularly among those researchers intrigued by classroom educating hones (see, for example, Brown, 1988; Freire, 1972a, 1972b; Kemmis & McTaggart, 1988). Many sources credit Kurt Lewin (1890-1947) with coining the term *action research* in about 1934 (Mills, 2000). According to Lewin, action research is a process that "gives credence to the development of powers of reflective thought, discussion, decision and action by ordinary people participating in collective research 'private troubles' that they have in common" (Adelman, 1993, p.8). Today action research represents a viable, practical strategy for social science studies requiring systematic, organized, and reflective investigations (Stringer, 1999). In its present use, action research is one of the few research approaches that embraces principles of participation, reflection, empowerment and emancipation of people and groups interested in improving their social situation or condition.

Action research, sometimes referred to as *participatory action research*, is a research framework that evolved from a number of different intellectual traditions. The approach has been described to be a highly reflective, experiential, and participatory mode of research in which all individuals involved in the study, researcher and subject alike, are deliberate and contributing actors in the research enterprise (Gabel, 1995; Wadsworth, 1998).

The purpose of this study was to examine the perceptions of selected university students regarding the using mobile tablet devices as a learning tool. Special interest was placed on the usability, effectiveness, satisfaction, and student experiences involving the tablets, as well as the perceived usability, effectiveness, and satisfaction of this mobile technology.

The four purposes of this chapter are to (1) describe the research methodology of this study, (2) explain the sample selection, (3) describe the procedure used in designing the instrument and collecting the data, and (4) provide an explanation of the statistical procedures used to analyze the data.

### 3.2 Reliability and Validity

The aggregate populace of Eastern Mediterranean University in spring semester 2016 is around 17,000 separately. So sample size (N) is noteworthy to achieve the dependability, legitimacy and sum up the result. Implying competency of the populace and palatable sample blunder are the principle models for the sample size. So N≥50+8m (M= independent variable) for multiple correlation. The "M" utilized as a part of this research was the aggregation of the autonomous variables. Whenever m=10, roughly 130 understudies is sufficient for the study. As per the over, the sample size of the study is enough attractive for all the study and measurable investigations connected in this study.

### 3.3 Sample

The methodology for this study was sampling of convenience population of 130 Eastern Mediterranean University students. Gay (1987), states that "Irregular examining strategy is the most extreme single approach to secure an unmistakable

specimen". However no method containing arbitrary examining that guarantees a delegate sample, however the likelihood of utilizing unintentional sample on this strategy was more than whatever other way. Gay additionally confirmed that unintentional sampling is a proper method for making the populace adjusted and make a significant relationship with subdivision. He likewise mentioned that polling hypothesis backing arbitrary testing as a viable decision in light of the fact that stratified the samples are conceivable nearer to the mean of the populace general.

Eastern Mediterranean University is a normal university with acceptable educational technologies such as Moodle, online courses and other in-class tools. The university establishment goes back to 1979 and since then it was working and still is top rated university in North Cyprus. Students from any nationality could study in different majors so researcher decided to collect data from random population of students to find different ideas about using mobile tablet devices.

Table 1 shows that there were 73 Male, 57 Female and total number of 130 student were participated. There was 56.2 percent of male and 43.8 percent of female students with highest frequency of 73 for male and 57 for female participants.

Table 1: EMU Students Gender Frequency

				Cumulative
Gender	Frequency	percent	Valid percent	percent
Male	73	56.2	56.2	56.2
Female	57	43.8	43.8	100.0
Total	130	100.0	100.0	

Table 2 shows age frequencies of participants and as it shown below, most of the students were between the ages 21-25 with the highest frequency of 64 and 49.2 valid percent according to table but only 8 students were at the higher age of 35 with 6.3 valid percent.

Table 2: EMU Participants Age Frequency

				Cumulative
	Frequency	percent	Valid percent	percent
<=20	21	16.2	16.5	16.5
21-25	64	49.2	50.4	66.9
26-30	23	17.7	18.1	85.0
31-35	11	8.5	8.7	93.7
>35	8	6.2	6.3	100.0
Total	40-	^= =	1000	
System	127	97.7	100.0	
Total	130	100.0		

As in table 3 showed, 1st year students with 28.1 valid percent and master students with 21.9 valid percent were the most number of participants in survey questionnaire.

Table 3: Participants Year of study

					Cumulative
		Frequency	percent	Valid percent	percent
Valid	1st year	36	27.7	28.1	28.1
	2nd year	23	17.7	18.0	46.1
	3rd year	20	15.4	15.6	61.7
	4th year	16	12.3	12.5	74.2
	Masters	28	21.5	21.9	96.1
	P.H.D	5	3.8	3.9	100.0
	Total	128	98.5	100.0	
Missing	System	2	1.5		
Total		130	100.0		

Table 4 shows that most of the students were around 3.00 - 4.00 for CGPA with the valid percentage of 61.1

Table 4: Participants CGPA frequency

					Cumulative
		Frequency	percent	Valid percent	percent
Valid	1.00 - 2.00	6	4.6	5.3	5.3
	2.00 - 3.00	38	29.2	33.6	38.9
	3.00 - 4.00	69	53.1	61.1	100.0
	Total	113	86.9	100.0	
Missing	System	17	13.1		
Total		130	100.0		

### **3.4 Data Collection Tools**

In following research, the questionnaire utilized to find the understudies observation on the utilizing ICT day by day. Tool utilized at the questionnaire. It was sect into three parts (see appendix questionnaire). Starts with, (item 1-4), tested the gender, age, year of study, GPA/CGPA. Section two, (item 5-8), examined the tablet/ smartphone ownership, internet access to tablet/ smartphone devices, frequency of using mobile

devices for learning at home, frequency of using mobile devices for learning at university. Section three, (item 1-27), examined the use of devices for homework searching for information, preparing and making presentation, preparation, communicating online with teachers, communicating online with other students, feeling comfortable when using the device in learning, device helps student explaining problems to the teachers, feeling interested in study if it was possible to use mobile devices, device guides students by the design of work, device helps students in measuring their progress in the title better, devices helps the rapidity of students job, assists to combine knowledge over different resources, assists to gain title relative knowledge, enables students to follow course better, enhances students daily learning, provides better alternatives to study, enables students to follow the courses better, devices would save students a lot of time in learning process, students can do their academic homework faster and better, exchange ideas with other students, exchange ideas with teachers, with devices students can access real-time data, with devices students can study anytime, anyplace. All these were measured in this part of survey.

#### 3.5 Data Collection

A closed-ended questionnaire (Appendix A) was utilized to roll up data from understudies. The questionnaire' population were the student volunteers who were studding at Eastern Mediterranean University of North Cyprus. There were 33 questions in the questionnaire. The Likert scale items included strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). The survey was circulated to 130 understudies in Eastern Mediterranean University for the study beneficiaries were asked for to finish the poll and return it back promptly they completed the process of filling it. There were 130 surveys, in English for a bigger number of understudies.

The researcher was mindful so as to abstain from building a perplexing and protracted poll so the answers would be agreeable and respond the inquiries in fewer time.

### 3.6 Method of Analysis

The information investigation required for inspecting the questionnaires for completion and culmination, coding and entering information into a database in Statistical Package for the Social Sciences (SPSS), and making an examination of unmistakable as indicated by recurrence dispersions and spellbinding measurements. The Frequency tables and descriptive insights are developed to show the outcomes concerning each of the research questions. T-Test and ANOVA were additionally utilized as a part of the investigation to analyzing the relationship between measurements of understudy engagement. Connection tables were built to see the relationship between the inquiries inquired.

The point of this section was to clarify the research methodology of the study, portray the sample choice, depict the system utilized as a part of outlining the instrument and assembling the information and give an edification of the factual procedures used to break down the information.

### Chapter 4

### **FINDINGS**

In this chapter, the potential and students' preparation for learning through mobile tablets discussed. Also finding distinctive components (for example, age, sex, CGPA and year of study) that could influence their choice for utilizing portable tablets. Questionnaire results and relations between both dependent and independent variables has discussed in detail. Some questions were shortened and identified by Q1, Q2, Q3 and Q4 which means:

- Q1: Which mobile device do you own? a) Tablet b) Smartphone c) both
- Q2: Do you have an internet access to your tablet/Smartphone? a) Yes b) no
- Q3: How often do you use your mobile device for learning purposes at home?
- a) Daily b) 2/3 times a week c) once a week d) once a month e) never
- Q4: How often do you use your mobile device for learning purposes at the university?
- a) Daily b) 2/3 times a week c) once a week d) once a month e) never

The above questions were positioned to find students' access to mobile devices and internet and also use them at university or home.

Based on frequency findings on table 8, 56.2 percent of participants were male and 43.8 percent were female students to answer the questionnaires.

### 4.1 Data Analysis

The following parts are the findings from questionnaire about students' perception in using mobile tablet devices at home or university and enhancement for learning purposes. Data were entered into SPSS and analyzed using Anova and T-Test analysis.

### **4.1.1 Perceptions of Students in Using Mobile Tablet Devices**

Table 5 shows the general significance values of information from Anova analysis.

Table 5: Significance	values of age. v	vear of study.	CGPA (	)1. (	)3 and $($	<b>)</b> 4
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Table 5. Significance values of age, year of study, C	UI A	, Q1,	Q5 and	<del>V</del>		
Question	Age	year	CGPA	Q1	Q3	Q4
I use my device for preparing my homework	.610	.112	.764	.557	.255	.089
I use my device for searching for information	.758	.333	.570	.652	.000	.003
I use my device for preparing and making presentations	.788	.317	.633	.011	.571	.246
I use my device for communicating online with my teachers	.508	.235	.532	.057	.580	.057
I use my device for communicating online with other students	.394	.324	.858	.476	.064	.102
I feel myself very comfortable when I use my device in learning	.273	.418	.527	.002	.498	.099
I think that my device helps me explaining my problems to my teachers	.059	.014	.413	.400	.433	.436
I would feel more interested in study if I could use mobile devices	.397	.348	.148	.016	.133	.000
My device guides me with the plan of my work	.175	.227	.244	.074	.390	.004
My device assists me in evaluating my progress in the subject better	.070	.073	.431	.234	.119	.021
My device enhances the speed of my work	.141	.009	.335	.047	.006	.024
My device helps me to integrate knowledge from various sources	.097	.624	.170	.208	.044	.008
My device helps me to obtain subject related knowledge	.488	.385	.544	.681	.269	.271
My device enables me to follow the course better	.797	.723	.154	.303	.024	.001
My device enhances my daily learning	.983	.353	.744	.329	.001	.000
My device provides better alternatives to study	.261	.136	.255	.522	.002	.132
My device would save me a lot of time in learning process	.665	.818	.470	.016	.022	.002
My device would enhance the effectiveness of my learning process	.867	.819	.477	.112	.046	.004
With my device I do my academic homework faster	.085	.546	.861	.151	.067	.039

With my device I do my academic homework better	.212 .117	.919 .166 .196 <b>.006</b>
With my device I can exchange ideas with my classmates	.452 .866	.883 .946 .152 .743
With my device I can exchange ideas with my teachers	.676 .414	.781 .766 .123 . <b>046</b>
With my device I can communicate with my teachers better	.091 .819	.810 .826 .208 .124
With my device I can access real-time data	.344 .010	.395 .965 . <b>015</b> .350
With my device I can study anytime, any place	.902 .112	.704 .181 . <b>011</b> . <b>010</b>

ANOVA is utilized to analyze contrasts of means among more than 2 bunches. It does this by taking a gander at variety in the information and where that variety is discovered (subsequently its name). In particular, ANOVA thinks about the measure of variety between gatherings with the measure of variety inside gatherings. It can be utilized for both observational and exploratory studies.

Based on research questionnaire findings age has 0.059 (5.9 percent) effectiveness on explaining the problems to the teachers by students, Although year of study has only .014 (1.4 percent) effect on students problem explanation to the teachers, .009 (0.9 percent) effect found on students devices enhance the speed of students work and .010(1 percent) declared that they could access real time data access.

According to table 5 findings there is no significance difference for CGPA variable with the questionnaire items and it might be caused by the 1<sup>st</sup> year students without any CGPA or unanswered.

Based on Q1 The .011 (1 percent) of students who had the ownership of mobile tablet devices, said they use their devices to preparing and make presentations, .057 (5.7 percent) using their devices to communicate with their teachers, .002 (0.2 percent) of

students feel very comfortable when they were using their devices in learning, this question had .016 (1.6 percent) of feeling more interested in study if they could use mobile devices, 0.047(4.7 percent) of students declared that their device enhances their speed of work.

According to Q3, 0.06 (6 percent) of students believe that their device enhances the speed of their work, 0.044(4 percent) of students said their device helps them to integrate knowledge from various sources, 0.024(2.4 percent) of students believes their device enables them to follow the course better, 0.01(1 percent) of students said their devices could enhances their daily learning and 0.02 (2 percent) of students declared their device provides better alternatives to study, 0.01 (1 percent) of students said enables them to follow the course better, 0.22 (2.2 percent) of students said their device would save them a lot of time in learning progress, 0.046 (4.6 percent) of students said their device would enhance the effectiveness of the learning process, 0.015(1.5 percent) of students said they can access to real time data with their device, 0.011(1.1 percent) of students said they can study any time at any place with their devices.

Based on Q4 only 0.003 (0.3 percent) of students said they use their devices for searching for information, .057 (5.7 percent) of students said they use their devices for communicating online with their teachers. 0.004(0.4 percent) of students believe that their device guides them with the plan of their work, .021 (2.1 percent) of students said their device assist them in evaluating their progress to in the subject better, .024(2.4 percent) of students enhance the speed of their work, .008(0.8 percent) of students said their device helps them to integrate knowledge from various sources, 0.001(0.1 percent) said their device enables them to follow the course better, although in same

questions the number has changed to 0.003 (0.3 percent), 0.002 (0.2 percent) of students said their device would help them to save a lot of time in learning progress, their device would enhance the effectiveness of their learning process was 0.004(0.4 percent) by students, 0.039(3.9 percent) said they do their academic homework faster, 0.006(0.6 percent) declared they do their academic homework better with their devices, .046(4.6 percent) of students believe that with their devices they can exchange ideas with their teachers, .010(1 percent) of students said they can study anytime, anyplace with their devices.

As a conclusion age has the most effect on students problem explanation (5.9 percent) with their teachers, there is no effect from students CGPA background and any effect on this test, Owning a mobile device could have the most effect on students communication with their teachers with the rate of (5.7 percent), students using their devices for learning purposes at home has most effect on speed of their work at home (6 percent), students using their devices for learning purposes at university has the most effect on communicating online with their teachers (5.7 percent).

#### 4.1.2 Gender and Internet Access to Tablet/Smartphone Analysis

Table 6 shows the gender and Q2 significance values of information from T-Test analysis.

Table 6: Significance values for gender and Q2 significances.

Question	Gende	Q2
	r	
I use my device for preparing my homework	.110	.546
I use my device for searching for information	.123	.349
I use my device for preparing and making presentations	.002	.629
I use my device for communicating online with my teachers	.299	.826
I use my device for communicating online with other students	.863	.773
I feel myself very comfortable when I use my device in learning	.146	.722
I think that my device helps me explaining my problems to my teachers	.599	.201
I would feel more interested in study if I could use mobile devices	.957	.303
My device guides me with the plan of my work	.086	.593
My device assists me in evaluating my progress in the subject better	.742	.871
My device enhances the speed of my work	.349	.707
My device helps me to integrate knowledge from various sources	.280	.846
My device helps me to obtain subject related knowledge	.024	.195
My device enables me to follow the course better	.005	.403
My device enhances my daily learning	.209	.488
My device provides better alternatives to study	.167	.445
My device would save me a lot of time in learning process	.144	.642
My device would enhance the effectiveness of my learning process	.037	.945
With my device I do my academic homework faster	.373	.956
With my device I do my academic homework better	.003	.555
With my device I can exchange ideas with my classmates	.506	.773
With my device I can exchange ideas with my teachers	.086	.945
With my device I can communicate with my teachers better	.576	.722
With my device I can access real-time data	.181	.844

A T-test is a factual examination of two populace implies. A two-specimen t-test analyzes whether two examples are distinctive and is ordinarily utilized when the differences of two ordinary disseminations are obscure and when a test uses a little specimen size.

Based on T-Test findings using device for preparing and making presentations .002(0.2 percent), device helps students to obtain subject related knowledge 024(2.4),

device enables students to follow the course better 005(.0.5 percent), students device enables them to follow the course better 011(1.1 percent), device enables students to follow the course better 001(0.1 percent) has My device would enhance the effectiveness of my learning process .037(3.7 percent), "With my device I do my academic homework better" is 003(0.3 percent), effected by gender and doing academic homework has the most effect from gender although internet access has no effect on any items for T-Test table.

As a conclusion gender has the most effect on different significant values and it might be caused by the different population of male and female participants.

# 4.3 The Relationship between the Students' Learning and Mobile Tablet usage

It is a device that permits you look at the relationship between two variables. Cross-tabulation is a standout amongst the most helpful logical apparatuses and is a pillar of the statistical surveying industry. One assessment is that solitary variable recurrence investigation and cross-tabulation examination represent more than 90 percent of all exploration investigations. Cross-tabulation investigation, otherwise called possibility table examination, is frequently used to break down straight out (ostensible estimation scale) information. A cross-tabulation is a two (or more) dimensional table that records the number (recurrence) of respondents that have the particular qualities depicted in the cells of the table. Cross-tabulation tables give a abundance of data about the relationship between the variables.

# 4.3.1 Relationship between Students Perceptions toward Using Mobile Tablets and Age, Year of Study, Q1, Q3, Q4 Variables

Table 7 shows that the perception level on the daily usage of mobile devices for searching information in their learning activities. As it can be seen, most of the students (79 percent) were agree on using their mobile devices on daily basis while they are searching an information for learning purposes. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.000.

Table 7: Perception of students use mobile devices for searching information at home

	I use my device	I use my device for searching for information						
	Strongly							
	Disagree	Disagree	Undecided	Agree	Strongly Agree	Total		
Daily	1	2	4	21	58	86		
2/3 times a week	0	0	3	12	11	26		
once a week	1	1	2	2	1	7		
once a month	1	0	0	3	4	8		
never	0	0	2	0	0	2		
Total	3	3	11	38	74	129		

Table 8 shows that the perception level on the daily usage of mobile devices for searching information in their learning activities at university. As it can be seen, most of the students (69 percent) were agree on using their mobile devices on daily basis while they are searching an information for learning purposes at university. This result is also satisfying the meaningful differences found in table 5, section 4.1.1 with the significant value of 0.003.

Table 8: Perceptions on using mobile devices at university for searching information

	I use my	device for	searching fo	r inforn	nation	
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
Daily	1	0	2	20	49	72
2/3 times a week	1	2	3	11	17	34
once a week	0	1	3	3	3	10
once a month	1	0	2	2	2	7
never	0	0	1	1	3	5
Total	3	3	11	37	74	128

Table 9 shows that the perception level on the owning different mobile devices and using them for preparing and making presentations. As it can be seen, most of the students (36 percent) were disagree on using their mobile devices on making presentation for learning purposes. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.11

Table 9: Students perception of having mobile devices and using them for making presentations

	I use my device for preparing and making presentations						
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	
Tablet	0	0	1	2	2	5	
Smartphone	23	13	14	15	17	82	
Both	4	6	5	7	17	40	
Total	27	19	20	24	36	127	

Table 10 shows that the perception level on using device for communicate online with teachers. As it can be seen, some of the students (40 percent) were agree on using their mobile devices for communicate online with teachers. This result is also satisfying the

meaningful differences found in table 5, section 4.1.1, with the significant value of 0.057.

Table 10: Having mobile device and feeling comfortable

	I feel myself very comfortable when I use my device in learning								
		Undecide							
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total			
Tablet	0	0	1	1	3	5			
Smartphone	7	10	23	21	19	80			
Both	0	4	3	17	16	40			
Total	7	14	27	39	38	125			

Table 11 shows that the perception level on using device for communicate online with teachers at university. As it can be seen, some of the students (40 percent) were agree on using their mobile devices for communicate online with teachers. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.057.

Table 11: Using mobile devices for communicating with teachers at university

	I use my de	I use my device for communicating online with my teachers							
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total			
Daily	7	13	13	19	19	71			
2/3 times a	9	7	6	7	5	34			
week	2	4	3	0	1	10			
once a week	1	1	1	4	0	7			
once a month	0	2	1	2	0	5			
Total	19	27	24	32	25	127			

Table 12 shows that the perception level on having mobile device and feeling comfortable when using devices in learning. As it can be seen, most of the students (80 percent) had smartphones and most of the average were agree and undecided (63 percent) on using their mobile devices on learning and feeling comfortable. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.002.

Table 12: Owning mobile tablets and feeling comfortable in learning

<u>-</u>	I feel myself very comfortable when I use my device in learning						
	Strongly						
	Disagree	Disagree	d	Agree	Strongly Agree	Total	
Tablet	0	0	1	1	3	5	
Smartphone	7	10	23	21	19	80	
Both	0	4	3	17	16	40	
Total	7	14	27	39	38	125	

Table 13 shows that the perception level on relationship between age and help of devices to explain problems to the teachers. As it can be seen, most of the students (62 percent) were at the ages 21-25 and most of them (21 percent) were undecided about helping devices to explain problems to the teachers. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.059

Table 13: Relationship between age and explaining problems

I think that my device helps me explaining my problems to my teachers Undecide Strongly Disagree Disagree d Agree Strongly Agree Total <=20 21-25 26-30 31-35 >35 Total 

Table 14 shows that the perception level on relationship between year of study and help of devices to explain problems to the teachers. As it can be seen, most of the students (35 percent) were 1<sup>st</sup> year students and most of them (13 percent) were undecided about helping devices to explain problems to the teachers. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.014.

Table 14: Year of study and helping explaining problems to teachers

teachers Undecide Strongly Strongly Disagree Disagree Agree d Agree Total 1st year 2nd year 3rd year 4th year Masters P.H.D Total

I think that my device helps me explaining my problems to my

Table 15 shows that the perception level on relationship between owning tablet or cellphone devices and feeling more interested in study if students could use mobile devices. As it can be seen, most of the students (83 percent) had smartphones and most of them (44 percent) were disagree or undecided. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.016

Table 15: Owning mobile devices and feeling interested using mobile devices

			Undecide		_	
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	
Tablet	0	1	0	2	2	5
Smartphone	9	22	22	20	10	83
Both	3	5	6	18	8	40
Total	12	28	28	40	20	128

Table 16 shows that the perception level on relationship between daily use of mobile tablets and feeling more interested in study if students could use mobile devices. As it can be seen, most of the students (45 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.000.

Table 16: using mobile device for learning purposes at the university and feeling more interested in study

	I would feel mo	I would feel more interested in study if I could use mobile							
		devices							
		Undecide							
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total			
Daily	2	10	14	29	16	71			
2/3 times a	4	8	11	9	2	34			
week	3	4	0	1	2	10			
once a week	2	3	1	1	0	7			
once a month	1	2	2	0	0	5			
never	12	27	20	40	20	107			
Total	12	27	28	40	20	127			

Table 17 shows that the perception level on relationship between students' devices guides them with the plan of their work and daily use of devices. As it can be seen, some of the students (28 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.004

Table 17: Using mobile device for learning purposes at the university and device guides

Burdes	My device guides me with the plan of my work						
			Undecide				
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total	
Daily	7	9	14	28	12	70	
2/3 times a week	3	4	10	12	4	33	
once a week	4	3	3	0	0	10	
once a month	1	1	2	3	0	7	
never	0	2	2	1	0	5	
Total	15	19	31	44	16	125	

Table 18 shows that the perception level on relationship between using mobile devices for learning purposes at the university and devices assist to evaluate students' progress. As it can be seen, most of the students (49 percent) were agree. This result is also

satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.021.

Table 18: Using mobile devices for learning purposes at the university and devices assist to evaluate students' progress

	My device assis	My device assists me in evaluating my progress in the subject					
			better			,	
			Undecide				
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total	
Daily	4	6	12	31	18	71	
2/3 times a	2	6	10	10	5	33	
week	3	2	2	2	1	10	
once a week	0	2	1	3	1	7	
once a month	0	2	2	1	0	5	
never	0	10	27	47	25	126	
Total	9	18	27	47	25	126	

Table 19 shows that the perception level on relationship between using mobile devices for learning purposes at home and device enhances the speed of students work. As it can be seen, most of the students (61 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.006.

Table 19: Using mobile device for learning purposes at home and speed of work

	My device enhances the speed of my work						
			Undecide				
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total	
Daily	6	5	13	35	26	86	
2/3 times a week	1	5	8	5	6	25	
once a week	1	2	2	2	0	7	
once a month	0	2	1	3	2	8	
never	1	1	0	0	0	2	
Total	9	15	24	45	34	128	

Table 20 shows that the perception level on relationship between year of study and device enhances the speed of students work. As it can be seen, most of the students (36 participants) were from 1<sup>st</sup> year of study and (15 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.009.

Table 20: students' perception level on device enhancement

	My	My device enhances the speed of my work						
					Strongly			
	Strongly Disagree	Disagree	Undecided	Agree	Agree	Total		
1st year	2	7	6	15	6	36		
2nd	0	1	5	5	11	22		
year	2	2	2	11	3	20		
3rd year	2	1	3	2	8	16		
4th year	0	4	6	10	6	27		
Masters	3	0	1	1	0	5		
P.H.D Total	9	15	23	44	34	126		

Table 21 shows that the perception level on relationship between using mobile devices for learning purposes at university and device helps students to integrate knowledge from various sources. As it can be seen, most of the students (61 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.008.

Table 21: Using mobile device at university and device helps to integrate knowledge.

My device helps me to integrate knowledge from various sources

Undecide d Strongly Disagree Disagree Agree Strongly Agree Total Daily 2/3 times a week once a week once a month never Total

Table 22 shows that the perception level on relationship between using mobile devices for learning purposes at university and students would be able to follow the course better. As it can be seen, most of the students (49 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.001.

Table 22: Using mobile devices at university and device ability to follow the course

	My device	My device enables me to follow the course better					
			Undecide				
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total	
Daily	2	3	18	21	28	72	
2/3 times a	0	7	11	10	5	33	
week	3	0	5	1	1	10	
once a week	0	1	1	4	1	7	
once a month	0	2	2	1	0	5	
never	<b>~</b>	12	27	27	25	107	
Total	5	13	37	37	35	127	

Table 23 shows that the perception level on relationship between daily use of mobile devices foe learning purposes and device enhancement. As it can be seen, most of the students (48 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.000.

Table 23: Using mobile device at university and devices enhancement for daily learning

	My device enhances my daily learning					
			Undecide		Strongly	
	Strongly Disagree	Disagree	d	Agree	Agree	Total
Daily	0	6	15	21	27	70
2/3 times a week	0	7	10	11	6	34
once a week	1	4	3	1	1	10
once a month	1	2	3	0	1	7
never Total	0	2	0	2	1	5
	2	21	31	35	36	126

Table 24 shows that the perception level on relationship between using mobile device for learning purposes at home and devices provides better alternatives. As it can be seen, most of the students (51 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.002.

Table 24: Using mobile device for learning purposes at home and devices provides better alternatives

	My device provides better alternatives to study						
			Undecide				
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total	
Daily	3	6	25	29	22	86	
2/3 times a	3	5	4	7	6	25	
week	2	2	1	1	1	7	
once a week	0	0	1	4	3	8	
never	1	1	0	0	0	2	
Total	9	14	31	41	32	128	

Table 25 shows that the perception level on relationship between using mobile device for learning purposes at home and devices would save time. As it can be seen, most of the students (58 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.002.

Table 25: Using mobile devices at home and devices would save time

	My device wo	My device would save me a lot of time in learning process						
			Undecide					
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total		
Daily	3	9	14	35	23	85		
2/3 times a	0	2	9	13	2	26		
week	0	2	1	4	0	7		
once a week	0	1	2	2	3	8		
once a month never	1	1	0	0	0	2		
Total	4	15	26	54	28	128		

Table 26 shows that the perception level on relationship between using mobile device for learning purposes at home would enhance the effectiveness of learning. As it can be seen, most of the students (57 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.004.

Table 26: Using mobile device at home and they would enhance the effectiveness of learning

	My device would e	enhance the	effectiveness	s of my le	arning process	
					Strongly	
	Strongly Disagree	Disagree	Undecided	Agree	Agree	Total
Daily	2	7	19	32	25	85
2/3 times a	2	2	9	10	3	26
week	0	1	3	3	0	7
once a week	0	3	1	4	0	8
once a month	0	1	1	0	0	2
never	4	1.4	22	40	20	100
Total	4	14	33	49	28	128

Table 27 shows that the perception level on relationship between using mobile device for learning purposes at home and doing academic homework faster. As it can be seen, most of the students (55 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.039.

Table 27: Using mobile device at home and doing academic homework faster

	With my de	With my device I do my academic homework faster						
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total		
Daily	2	12	15	27	28	84		
2/3 times a week	2	6	7	8	3	26		
once a week	0	1	2	3	1	7		
once a month	1	1	4	1	1	8		
never	0	1	0	1	0	2		
Total	5	21	28	40	33	127		

Table 28 shows that the perception level on relationship between using mobile device for learning purposes at home and doing academic homework better. As it can be seen, most of the students (53 percent) were agree. This result is also satisfying the

meaningful differences found in table 5, section 4.1.1, with the significant value of 0.006.

Table 28: Using mobile device at home and doing academic homework better

	With my de	vice I do m	y academic l	nomewo	rk better	
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
Daily	2	7	24	25	28	86
2/3 times a	0	8	3	7	8	26
week	0	2	1	3	0	6
once a week	0	1	4	2	1	8
once a month	1	0	0	1	0	2
never Total	3	18	32	38	37	128

Table 29 shows that the perception level on relationship between year of study and accessing real-time data. As it can be seen, most of the students (35 participant) were 1<sup>st</sup> year students and (29 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.010.

Table 29: Year of study and access real-time data

	With	With my device I can access real-time data				
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
1st year	0	0	6	18	11	35
2nd year	0	3	4	11	4	22
3rd year	1	1	5	6	7	20
4th year	3	2	4	4	3	16
Masters	1	0	7	8	11	27
P.H.D	0	0	5	0	0	5
Total	5	6	31	47	36	125

Table 30 shows that the perception level on relationship between using mobile device for learning purposes at university and study anytime any place. As it can be seen, most of the students (57 percent) were agree. This result is also satisfying the meaningful differences found in table 5, section 4.1.1, with the significant value of 0.010.

Table 30: Using mobile device at university and ability to study anytime, anyplace

	With my	device I ca	n study anyt	ime, any	place	
			Undecide			
	Strongly Disagree	Disagree	d	Agree	Strongly Agree	Total
Daily	6	1	7	15	43	72
2/3 times a	3	2	6	10	13	34
week	2	1	1	4	2	10
once a week	2	1	2	1	1	7
once a month	0	2	0	2	1	5
never Total	13	7	16	32	60	128

# 4.3.2 Relationship Between Gender and Daily Use of Mobile Devices at Home for learning purposes.

Table 31 shows that there is a meaningful difference between the questions "I use my device for preparing and making presentations" with "Gender". This result is also satisfying the meaningful differences found in table 6, section 4.1.2, with the significant value of 0.002. As it shown in table 31, male students were disagree (20 percent) but female students were strongly agree (25 percent) so it seems gender can affect the teachers' attitude toward using device for preparing presentations.

Table 31: Gender and using device for preparing and making presentations

	I use my de	I use my device for preparing and making presentations					
		Disagre			Strongly		
	Strongly Disagree	e	Undecided	Agree	Agree	41.00	Total
Male	20	9	16	14	11	1	71
Female	7	10	4	10	25	0	56
Total	27	19	20	24	36	1	127

Table 32 shows that there is a meaningful difference between the questions "my device helps to obtain subject related knowledge" with "**Gender**". This result is also satisfying the meaningful differences found in table 6, section 4.1.2, with the significant value of 0.024

As it shown in table 32, there were same attitude for both male and female students and they were both agree (27 percent).

Table 32: Gender and device helps to obtain subject related knowledge

	My device	My device helps me to obtain subject related knowledge					
	Strongly						
	Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	
Male	3	3	16	27	23	72	
Female	1	1	4	27	24	57	
Total	4	4	20	54	47	129	

Table 33 shows that there is a meaningful difference between the questions "My device enables me to follow the course better" with "Gender". This result is also satisfying the meaningful differences found in table 6, section 4.1.2, with the significant value of 0.005. As it shown in table 33, there were more undecided males (25 percent) in contrast to females which were agree (23 percent).

Table 33: Gender and device ability for students to follow the course better

	Strongly					
	Disagree	Disagree	Undecided	Agree	Strongly Agree	
Male	4	10	25	14	17	70
Female	1	3	12	23	18	57
Total	5	13	37	37	35	127

Table 34 shows that there is a meaningful difference between the questions "My device would enhance the effectiveness of my learning process" with "**Gender**". This result is also satisfying the meaningful differences found in table 6, section 4.1.2, with the significant value of 0.037.As it shown in table 34, male (29 percent) and female (20 percent) students were both agree.

Table 34: Gender and the effectiveness of learning process

	Strongly				Strongly	
	Disagree	Disagree	Undecided	Agree	Agree	
Male	2	9	22	29	9	71
Female	2	5	11	20	19	57
Total	4	14	33	49	28	128

Table 35 shows that there is a meaningful difference between the questions "With my device I do my academic homework better" with "**Gender**". This result is also satisfying the meaningful differences found in table 6, section 4.1.2, with the significant value of 0.003

As it shown in table 35, male students (25 percent) were undecided and female (24 percent) students were strongly agree about using device to do academic homework.

Table 35: Gender and doing academic homework better

	Strongly					
	Disagree	Disagree	Undecided	Agree	Strongly Agree	
Male	2	11	25	20	13	71
Female	1	7	7	18	24	57
Total	3	18	32	38	37	128

### **4.4 Conclusion**

From perception students in using tablet mobile devices analysis, it has been found that there is no meaningful differences between the questions "I use my device for searching for information, I use my device for communicating online with my teachers, I think that my device helps me explaining my problems to my teachers, I would feel more interested in study if I could use mobile devices, My device enhances the speed of my work, My device helps me to integrate knowledge from various sources, My device enables me to follow the course better, My device enhances my daily learning, My device would save me a lot of time in learning process, My device would enhance the effectiveness of my learning process, With my device I can access real-time data, With my device I can study anytime, anyplace", with same significance value which is less than 0.05.

From the Table 5 section 4.1.1 analysis it has been found there is no meaningful differences between the question "I use my device for preparing my homework", "I use my device for communicating online with other students", "My device helps me to obtain subject related knowledge" and "With my device I can exchange ideas with my classmates" with any significant value which is less than 0.05.

From table 6 analysis section 4.1.2, it has been found that there is no meaningful difference between the question "I use my device for preparing my homework"," I use my device for searching for information"," I use my device for communicating online with my teachers"," I use my device for communicating online with other students"," I feel myself very comfortable when I use my device in learning"," I think that my device helps me explaining my problems to my teachers"," I would feel more interested in study if I could use mobile devices"," My device guides me with the plan of my work"," My device assists me in evaluating my progress in the subject better"," My device enhances the speed of my work"," My device helps me to integrate knowledge from various sources"," My device enhances my daily learning"," My device provides better alternatives to study"," My device would save me a lot of time in learning process"," With my device I do my academic homework faster"," With my device I can exchange ideas with my classmates"," With my device I can exchange ideas with my teachers"," With my device I can communicate with my teachers better" and "With my device I can access real-time data" with any significant value which is less than 0.05.

Based on findings from different students with different age and gender, it has found out there is a relation between male and female decisions toward different cases in use of mobile devices. So gender could affect their decisions. Though there were also lots of variables which expected to be important on students' education using mobile devices.

### Chapter 5

### **CONCLUSION**

In this research, it was discovered that Information and Communication Technology assume critical part in today training. It is generally trusted that the utilization of mobile tablets in training empowers students to do their school work quickly, making the school work more adaptable for both the teachers and the students. There are such a variety of approaches to utilize Information and Communication Technology is utilized as a part of instruction. For instance, when solicited the students their discernment from how they utilize mobile tablets instruments in their scholarly assignment, some said it makes a charming grain in the learning environment. Fundamentally this implies utilization of ICT makes better correspondence in learning places, understudies no more need to go to class with enormous course books and composing numerous notes in learning areas rather they consider in class with PC whereby the addresses are introduced on a projector screen, addresses are completed utilizing mobile tablet apparatuses. Additionally, it was found that utilizing ICT as a part of a foundation (like Eastern Mediterranean University) enables understudies finish their scholastic assignments quicker and better. This relates with the way utilize mobile tablets outside the classes or at houses where through students search the web for school work, understudies may download, transfer and peruse articles from the college sites or on the web, students may utilize PC for gathering work and speak with different understudies, understudies and instructors likewise convey on the web, speak with different companions or course mates which make them offer thoughts and musings between themselves outside the classrooms. Utilizing mobile tablets makes work simpler for the students, particularly when the student speak with instructors and their kindred students which should be possible utilizing informal communities, learning frameworks like Moodle and so forth.

As a result, Information and Communication Technology is a thing that ought not to be forgotten in learning areas. mobile tablets admit the educators the chance to fit in with their instructing and the understudies to have the readiness to take in more, The utilization of Information and Communication Technology has enhanced the learning method in instructive area which likewise add to the constructivism of learning and helps the teachers and the understudies to enhance much in exercises, for example, talk board, discussion, and interpersonal organizations visiting. Mobile tablets likewise makes the instruction focused for the learner by a self-learning climate which empowers the students to tweak their instructive experience. Advancements are presently actuating each part of age in today instruction. They are advancing conversions, use and contribution data and advance educating and studying method. Mobile tablets are truly causing changes in educating furthermore the ways the students learn. It makes the learning environment dynamic, community oriented, and complement, innovative and making appraise absorbing as a change over the customary training.

#### **5.1 Recommendation**

As mentioned before, the purpose of this research was to find out the students perception in using mobile tablet devices in education. Students and instructors should

be well trained with latest technologies and tools so it can increase the performance of class activities and it can engage more students and would help them to integrate with teachers or other classmates. Mobile devices has the potential of being used in any aspect of education so it needs creativity and more educational ICT tools to cover as much as possible sides of learning.

For future related studies, it could be proposed to build test estimate Furthermore, differing qualities obviously materials may be expanded so as to acquire productive results from the procedure of web learning. Other than of this, expansion of liveliness furthermore, recordings might be useful to improve substance of web learning environment. In conclusion, more endeavors are required especially towards to login framework to avert issues related with web association

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## **APPENDIX**

### **Appendix A: Questionnaire**

# Perception of Students toward Using Tablet Computers/Smartphones in Education

### **Case study: Eastern Mediterranean University**

Sex:	a) Male	9	b) Femal	е					
Age:	a) <= 20	b) 21 -	25 c	) 26 – 3	30	d) 31 -	35	e) > 35	
Department:					•				
<b>Year of study</b> f) PhD	:a) 1 <sup>st</sup> year	b) 2 <sup>nd</sup> y	vear c	) 3 <sup>rd</sup> ye	ar	d) 4 <sup>th</sup> ye	ear	e) Maste	ers
<b>CGPA:</b> a) 0.00 4.00	0 - 1.00	b) 1.00	- 2.00	(	c) 2.00	- 3.00		d) 3.00	-
Which mobile	davisa da vau	. own2	a) Tablot		h) Sma	rtnhono		c) both	
wnich mobile	device do you	own?	a) Tablet	l	b) Sma	rtpnone		c) both	
<b>Do you have a</b> no	an internet acc	ess to y	our tabl	et/Sma	artpho	ne?	a) Yes		b)
How often do	you use your	mobile	device fo	r learn	ing pu	rposes	at hom	e?	
a) Daily b) 2/	3 times a week	c) once	e a week	d) onc	e a mo	nth	e) neve	r	
How often do university?	you use your	mobile (	device fo	r learn	ing pu	rposes	at the		
a) Daily	b) 2/3 times a	week	c) once a	week	d) once	e a mont	:h e) n	ever	

## Please rate the following from 5 to 1 (5-Strongly agree, 4-Agree, 3-Undecided, 2-Disagree, 1-Strongly disagree)

	5	4	3	2	1
1) I use my device for preparing my homework					
2) I use my device for searching for information					
3) I use my device for preparing and making presentations					
4) I use my device for communicating online with my teachers					
5) I use my device for communicating online with other students					
6) I feel myself very comfortable when I use my device in learning					
7) I think that my device helps me explaining my problems to my teachers					
8) I would feel more interested in study if I could use mobile devices					
9) My device guides me with the plan of my work					
10) My device assists me in evaluating my progress in the subject better					
11) My device enhances the speed of my work					
12) My device helps me to integrate knowledge from various sources					
13) My device helps me to obtain subject related knowledge					
14) My device enables me to follow the course better					
15) My device enables me to follow the course better					
16) My device enhances my daily learning					
17) My device provides better alternatives to study					
18) My device enables me to follow the course better					
19) My device would save me a lot of time in learning process					
20) My device would enhance the effectiveness of my learning process					
21) With my device I do my academic homework faster					
22) With my device I do my academic homework better					
23) With my device I can exchange ideas with my classmates					
24) With my device I can exchange ideas with my teachears					
25) With my device I can communicate with my teachers better					
26) With my device I can access real-time data					
27) With my device I can study anytime, any place					