

**Perceptions of Students on the usage of Mobile
Phones in Foreign Languages and English
Preparatory School: The Case of
Eastern Mediterranean University**

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ABSTRACT

The significance of learning is not hidden to anyone in today's world more than ever before. Using the cutting edge technologies to facilitate and expedite education has always been one of the priorities of education authorities. However, the pace at which the authorities make the final decision whether or not allow a new technological gadget in the official curriculum seems to be not fast enough to keep up with the latest trends in society. Therefore, scholars are required to accumulate the needed data so that they are able to ensure the authorities of the efficiency of the new advances in technology.

This thesis tries to evaluate the emerging technologies, smart phones in particular, from the perspective of the prime stakeholders i.e. students, who are more often than not, neglected in decision-making processes of education. The researcher attempts to provide appropriate evidence for the education authorities, so that they can make more educated judgments about the future of instructional technologies such as mobile phones.

Keywords: Instructional technologies, smart phones, perceptions of students, students' beliefs.

ÖZ

Eğitimin önemi günümüzde her zaman için gizli kalmamıştır ve önemli bir yer tutmaktadır. Eğitimdeki otoriteler tarafından da teknolojinin kullanımı ve eğitimdeki yeri öncellenmiştir. Buna karşın yetkililer tarafından resmi müfredata girebilecek olan yeni teknolojik uygulamaların yeteri kadar hızlı olmadığı ve toplumdaki yeni trendlere ulaşamadığı ortaya çıkmıştır. Dolayısıyla araştırmacılar, yetkililerin yeteri kadar yeni teknolojiyi takip edip etmedikleriyle ilgili gerekli bilgileri toplamalıdır.

Bu araştırma, yeni çıkan teknolojileri, özellikle akıllı telefonları, öğrencilerin, ki eğitimde karar alma sürecinde herhangi bir söz hakkı verilmeyen kişilerdir, perspektifinden değerlendirmeye çalışmıştır. Araştırmacı gerekli kanıtları eğitim yetkililerine sağlamaya çalışmıştır. Bunun sonucunda ise, yetkililer de eğitim teknolojileriyle ilgili eğitim açısından daha yapılandırıcı ve pragmatik kararlar alabileceklerdir.

Anahtar Kelimeler: Eğitim Teknolojileri, Akıllı telefonlar, Öğrencilerin inançları, Öğrencilerin tutumları.

DEDICATION

Most importantly I want to dedicate my thesis to my beloved husband who supported me greatly.

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ABBREVIATIONS

M-learning	Mobile Learning
ICT	Information and Communication Technology
SDL	Self-directed learning

Chapter 1

INTRODUCTION

In today's world, the pace of emergence of new technologies is so rapid that most of the time the scholars fail to keep up, investigate and theorize the new alterations which were made by technology. As a result, many educators remain reluctant in the utilization of the new advances in the field of education due to lack of empirical research.

In the last decade or so, mobile phone has proved to be a pioneer in the field of education. As the name suggests, when it comes down to mobile technology, it can be defined as a portable handheld technology (i.e mobile phone) which makes it possible to be used literary anywhere and anytime. However, not everyone is prepared to go through these changes in order to keep up with the new usages of this powerful tool. Furthermore, there are many people who are not content with either the efficacy of these new devices or with the amount of institutional assistance for utilizing mobile devices to facilitate obtaining of knowledge. Besides educators, parents also have their doubts about the utilization of mobiles in the process of learning and quite often they communicate their uncertainty to both their children and educators.

1.1 Background of the Research

Learning has always been considered vital to the survival of the human beings; whether we contemplate obtaining new skills to stay alive in the primitive eras or, as

it is mostly the case in the contemporary times, acquiring new competencies which can assist us to have better jobs, better lives, better relationships and so on. In this research, learning for academic purposes has been selected as one of the pillars of survival in general, since by gaining knowledge you can make your lives more comfortable and pleasant and in the long run thrive much better.

When it comes to education, scholars have always been seeking new ways to expedite the learning process. Starting from chalk and blackboard towards using different media such as pictures, audio and video, the expedition for finding new technologies to be used in the classroom has never ceased to end. More recently, however, it seems that a new revolution has happened thanks to the advances in the field of computer and digital tools.

On the one hand, mobile phones have almost all the capabilities of a computer plus many more advantages which they bring with them such as: being very convenient to use almost everywhere, not being too expensive. Furthermore, they provide a plethora of applications most of which are free of charge or cost very little. On the other hand, in this time and age, the new generation meets digital devices at the same time that they meet their parents for the first time, if not sooner. In his article Prensky (2001) coined the term “digital native” which simply defines and addresses the new generation that comes to use the new cutting-edge technology as they grow up and they really get very good at it.

1.2 The Problem Statement

In the last decades, more consideration has been directed on the application of mobile learning in the turf of education both by scholars and educators. In recent

years, researchers have begun to investigate language learning using various mobile devices such as mobile phones (e.g., Wong, Chin, Tan, & Liu, 2010), pocket PCs (e.g., Wong & Looi, 2010), and Apple iPhones (e.g., Jong, Specht, & Koper, 2010).

These researchers often concern themselves with design features that capitalize upon Wi-Fi access, Internet browsers, and text input. Most of these researchers have found that embracing the mobility and connectivity of mobile devices may lead to innovation in language learning for students across different environments (Looi et al., 2010; Tai, 2012). However, few researches have been conducted in order to look at this new phenomenon from the viewpoint of students.

In addition, technology-oriented trainings and resources may not meet the needs of individuals in understanding the nature of learning. Stockwell (2007) argued that survey results about mobile learning (e.g., Thornton & Houser, 2002) in classroom settings will be different when the learners have a choice to use mobile devices (e.g., mobile phones) or something else (e.g., desktop PCs) outside the classroom.

If the three components of a successful educational system is to be considered (i.e. educators, theoreticians and students), there is a priority to consider the students' opinions about the decisions made about them by educators based on the work of theoreticians. There seems to be a gap between what the authorities of the field prescribe and how learners actually feel about those changes.

1.3 Research Questions

The researcher aims to investigate the following questions:

1. Are university students fully aware of the educational role of mobile phones?
2. Do students have a positive attitude towards using mobile phones for learning purposes?
3. To what extent do students feel that they have the necessary skills to use mobile phones for learning?
4. What are the students' perceptions regarding teachers support or demote with the use of mobile phones in classrooms?

1.4 Aim of the Research

The aim of this research is to explore the viewpoints of learners on utilizing mobile phones and their self-management awareness in learning. It is also worth taking into account how students suppose their teachers welcome this new technology when it is added to academic surroundings.

Furthermore, this research aims at evaluating students on their perceptions of their own self-management when it comes to using mobile phones as a supplementary device in facilitating education. In other words, in this research, it is tried to figure out whether students have the awareness to self-manage their mobile use for academic purposes and also if they are willing to actually use this digital gadget in alignment for their studies. In addition, it aims to assess the students' beliefs whether mobile learning should be integrated into their academic curricula or not. In other words, this research tries to narrow the gap between the learners' viewpoints and that

of the educators by figuring out if, according to students' beliefs, mobile learning ought to be included in their university curricula.

1.5 Significance of the Study

More often than not, the crucial decision of selecting a new technology or approach is made only by people at the either end of the spectrum (educators or learners). In the case of education, the decision is usually made by education authorities. However, by conducting proper research the degree of readiness among the students can be investigated. The ultimate aim of this research is to pave the way for a more clear common ground between the learners and the educators by shedding light on the students' perceptions toward mobile phone and its implications. Once the educators become aware of the fact that learners are ready to manage their own knowledge gaining process through the use of mobile phone, then, they can make a more informative decision about how to integrate this device into the academic corpora for the purpose of supplementation and better comprehension.

By discovering the perceptions of the students towards mobile use in the academic environments, the decision-makers in the education field become more aware of students' beliefs and therefore can try to follow students on the same wavelength in order to make more fruitful decisions. By the same token, when students see that their educators are paying closer attention to their needs, they will also make an effort to appreciate the learning process more.

Moreover, as it has become a requirement in the modern world, people are required to undergo many changes that come with the advancements in the field of technology. A few years ago, even the notion of holding a mini-computer in the palm

of your hand was unthinkable. Nevertheless, at the moment, students have the possibility to learn plenty using their smartphones. Therefore, there is a need to provide empirical evidence to pave the way for some kind of common ground that allows both teachers and students to enjoy the many academic advantages of mobile phones.

1.6 The Assumptions

The following assumptions have been taken into consideration:

- The questionnaire on hand is estimated to specify the trends and relevancy of mobile-learning with university scholars.
- Informants (students) to be tested are expected to be honest about their answers.
- Participants are assumed to read questionnaire carefully and their answers reflect their clear perceptions.

1.7 Limitations

Mobile-learning is quite a new occurrence. This descriptive research assesses existing mobile learning tendencies among tertiary university learners in Eastern Mediterranean University. The university students come from over 35 countries (as stated in the university website). The research excludes younger students in primary or secondary level.

The research is conducted in a multicultural context. Thus, the outcome ought to be approached with prudence because the circumstances in other countries and universities might be significantly dissimilar. Instructors' and parents' outlook have not been included in this research. For that reason, upcoming research needs to take

account of other stakeholders, for instance, instructors, school authorities, and parents. Longitudinal qualitative research and experimental research are capable of scrutinizing the usefulness of supervised and unsupervised mobile usage in the field of education in upcoming years.

1.8 Definition of Terms

Digital natives: The word digital-native was created and became popular by instructional advisor Marc Prensky in his 2001 paper named “Digital Natives, Digital Immigrants”, where he justifies the modern decrease in US education to education providers’ failing to comprehend the requests of contemporary pupils.

Digital Immigrants: A digital immigrant is someone who came to this world previous to the worldwide revolution of digitalization. The word digital immigrant could in addition pertain to people that came to this world subsequent to the swell of digital technology and they did not have any dealings with it as youngsters. Digital immigrants are the reverse of digital natives, who have been in contact with technology since they were born.

Student centered Instruction: Pupil-centered approach is the opposite of the long-established teacher centered approach. According to this approach, gaining knowledge is cooperative, collaborative, and society based. Pupils are guided to lead their own knowledge gaining and to collaborate with other pupils on class projects and homework that are both ethnically and in a social context applicable to them. Learners grow to be confident, self-directed, and practical.

Smart Phone: a mobile phone that executes a lot of the tasks of a personal computer, normally featuring a touch-screen edge, Internet access, and an operating system with the ability to execute mobile applications.

Mobile-learning: education or training done through portable computing gadgets including smart phones or tablets.

SDL: Self-directed learning (SDL) is a teaching method which allows learners, under the supervision of the instructor, make decisions about what they want to learn and how they want to learn it.

Chapter 2

LITERATURE REVIEW

There have been many types of research done in the last couple of decades to discover the main features of new technologies and their roles in education. However, fewer of these researchers have focused directly on the learners' perceptions towards using mobile phones for academic purposes. The major topics discussed in this chapter include mobile phones, integration of mobile phones in higher education, school level approach to the adoption of mobile phones, application of mobile phones in education, students' perception toward the mobile phone, and students' familiarity with using mobile phones and self-management in learning.

2.1 Mobile Phones

As it is true for computers, the first generation of mobile phones used to look extremely different: much heavier than what we see today and of course in terms of size, they were much bigger. However, they did not serve as many purposes as they do today. In fact, they were merely used for transmitting phone calls only. As time went by, however, as it happened to computers and many other digital devices, mobile phones also started to look much lighter and smaller. As a result, they were more convenient to carry around than before. On the same token, the technology used in these devices underwent a revolution by the application of the internet. The new features now available on mobile phones included: messaging, photographs, and audio/video recording (Chinnery, 2006), in addition, the new communicative and

computational abilities enabled the users to interact with the device in order to communicate on social media or manage their own personal data (Chao & Chen, 2009).

More recently though, the new models are referred to as smartphones which they even go further to do the full functionality of a personal computer. Now, it is easier than ever to take advantage of features such as surfing the net in order to get connected with and browse the World Wide Web where a plethora of authentic material is available especially for language learners (Cui & Wang, 2008). As Kukulska-Hulme, Sharples, Milrad, Arnedillo-Sánchez, and Vavoula (2011) suggest “downloading of content is particularly appropriate for their wide-screen, in addition to free or inexpensive applications for smartphones”. They further conclude that these new features enable the learners to become motivated according to their own personal interests before they even get involved with the task. Thus, mobile advances are “believed to be able to extend learning opportunities in a meaningful way” (Thornton & Houser, 2005).

Recent research on mobile phones used in different perspectives of language learning supports the hypothesis that mobile phones are fruitful to expedite L2 learning. However, as Kukulska-Hulme (2009) concurs, it is unanimously agreed that the mobile phones as a new learning technology are not meant to take the role of teachers and educators.

The studies conducted in the recent years in different fields such as science (Hwang, Wu, Tseng, & Huang, 2010), social science (Chiou, Tseng, Hwang, & Heller, 2010) and language courses (Ogata, Matsuka, El-Bishouty, & Yano, 2009)

have successfully proved the positive role of mobile phone in supporting learning opportunities. For example, several studies have reported the successful use of mobile phones in the learning activities of various courses. For instance, Chen, Chang and Wang (2008) employed the scaffolding theory to conduct mobile learning activities; in the meantime, Chu, Hwang, Huang, and Wu (2008) conducted several outdoor learning activities in a butterfly ecology garden by integrating mobile learning environments with electronic library facilities.

On the other side of this spectrum, mobile phone has begun to play an important role in the everyday lives of pupils; and by using mobile phones for academic purposes, learners have unlimited access almost everywhere (Burston, 2016). One reaction to this new phenomenon is the usage of new approaches which have integrated mobile phones to expedite language learning.

2.2 Integration of Mobile Phone in Higher Education

In this part, first technology is going to be discussed in general and later mobile phone is going to be investigated more closely. In an educational environment, “technology” can be referred to as just chalk and blackboard, learners’ notebooks and pencils, or more advanced gadgets such as computers, computer software and internet and for the purpose of this research mobile phones.

Other social activities such as lectures, group activities, labs and field trips can also be introduced as well (Murphy, Walker, & Webb, 2013). In many cases, there might be a confusion and defensiveness as stated in (Snart, 2010) “a rejection of what has come before, when this need not actually be the case at all”. He uses the example where a student uses a notebook and a pen to record what the teacher has said in

class. This way he can remember them later and refer to them for future study. The same can be true when it comes to more recent technologies such as laptops and mobile phones.

Many technologies which are being used in tertiary education nowadays incorporate the use and application of approaches such as e-learning, online learning, web-based learning or blended learning, each often in addition to learning management systems. Oblinger, Oblinger, and Lippincott (2005) assert in their book that the educational organizations need to move at the same pace as technology advances. They need to change their view on the classroom as the only place to learn and move toward a more efficient perspective which accounts for spaces which are not limited to walls and buildings.

There is, however, another dimension regarding this matter which has to be taken into account that is not only technologies can be of assistance to the learners, but also technology can be called on in order to better suit the individual needs and interests of the students so that learning happens more rapidly. Hagner and Schneebeck (2001) suggested that it is the responsibility of the higher education institutions pave the way for learners by preparing the environment so that they can make use of the new devices.

On the other hand, while information and communications technologies have the ability to enrich the process of learning, it is vital that the educators effectively direct the relevance to experience and needs of the students (Rickards, 2003).

Nevertheless, that does not downgrade the role of the teachers. Not only that, but also mobile phone in higher education might work best when it is used as a learning tool, and most importantly, when it is integrated by the teacher's feedback on how and why it is being used (Snart, 2010).

Although there are various methods to incorporate mobile phone into the academic settings, it is of paramount importance this should happen based on learning theories and educational practices (Jackson, Gaudet, McDaniel, & Brammer, 2009). In their book, Clark and Mayer (2016), suggest that if there is too much emphasis on the role of cutting edge technologies, we run the possibility of neglecting the role of the learners. Herrington and Kervin (2007) advocate this viewpoint and add that:

Technology presents the opportunity to employ powerful cognitive tools that can be used by students to solve complex and authentic problems. In order for this to occur, however, technology needs to be used in theoretically sound ways, and it needs to be used by students rather than teachers.

2.2.1 Advantages of Integration of Mobile Phones into Higher Education

Even with a brief review of the relevant literature, it can be clearly seen that since technology has been introduced in education, many reports have been made on the success of this integration. For instance, Gulek and Demirtas (2005) reported that learners that participated in the study using new technology scored in general 17% higher in their test scores.

However, higher test achievement is not the only upside of using technology. Technology can be used for assessment too. Using the functionality of new technologies can greatly enhance the way that evaluation is taking place. In addition, it can provide immediate feedback for learners not only in the class but also while

they are away from school. One of the areas that mobile phone can really make a difference is teaching students with special needs.

2.2.2 Disadvantages of Integration of Mobile Phone into Higher Education

One of the very first challenges of integration is the device itself. For one thing, these new technological devices have been created for general use and not having the notion of education in particular in mind. Therefore, teachers need to be aware of the limitations and configurations of some devices and they also need to be able to guide learners with the installation of educational programs and applications on their devices.

For another, the teachers themselves, need to have a proper background of mobile phones use and they also need to be familiar with different approaches which incorporate mobile phone into the curriculum. Needless to say that it can be challenging for the educators to stay up to date with the current of technology.

2.3 School Level Approach to Adoption of Mobile Phones

So far, role of the devices, teachers, and learners in the deployment of new mobile phone have been discussed. However, there is a higher institution which can facilitate and in all practicality allow for all the stakeholders to enjoy the new advances. The institution can both support and provide the approaches necessary for the incorporation of the mobile phone among staff and learners. This involvement, of course, plays a vital role in the success or failure of the integration of the new device.

This involvement can range from the installation and maintaining of wireless networks that are suitable in quality and quantity to allow the use of these devices in learning across campuses to the technological support of both educators and learners.

It also consists of the fact that how the university approaches the selection of mobile platforms that it will support. Many universities have already started addressing this via the development of mobile learning initiatives that address these very issues (Malisch & Montes, 2011).

2.4 Application of Mobile Phones in Education

The science of education has come a long way to use the new technologies to replace or at least enhance more conventional methods such as textbooks, visual aids, and presentation media. Smart phones allow for a student-centered learning, group collaboration and enhancing the self-management skills of students (Clark and Mayer 2016).

2.4.1 Recording Lectures

One of the many possibilities which mobile phones bring to the academic environment is the ability to record lectures. By doing so, students are no longer limited to the walls of classrooms and can listen to their teacher again on the way back home or almost anywhere that is convenient for them. This way they do not miss the important information provided by the teacher. There is also the possibility that the recordings are done by the teacher prior to the class time. As a result, students come to class more prepared and the teacher needs to just clarify the more problematic areas and use the class time far more efficiently. In addition, mobile phone is not limited to audio and it can also include video as well.

2.4.2 Cell Phones as a Student Response System

Another approach to using mobile phones or devices in the class which can make learning more exciting and collaborative is by using certain applications or web 2.0 services making a student response system. This way the learning process becomes more engaging and collaborative. Teachers can take advantage of this feature to

design games and other fun activities in order to develop schemata at the brainstorming part of the class, carry out quick quizzes in either individual or team work styles or even go beyond the walls of the classrooms and blend the class by extending the discussion outside.

2.4.3 Delivering Materials

Another advantage which mobile phones bring to the learning environment is the ability to send almost all types of files such as text, audio, video, picture, pdf and etc. to students' devices without the need to use any extra devices. This can be done in a matter of seconds which also affects the time efficiency of the class. In addition, students get to focus on the material they have received from their teachers at their convenience whether it is a diagram, a power point presentation or an article in the PDF format.

2.4.4 Teaching and Learning Applications

Using mobile phones for learning purposes is not a very new notion. However, the emergence of new applications on different platforms (android, IOS, and others) has raised the interest level of both educators and learners. It seems that now from government organizations to pizza parlors have developed their own applications. Thanks to advances in the field, now mobile applications can have multiple functionalities such as enhanced audio, video and processing capabilities.

Consequently, there are far more applications using these functionalities in their environments. Self-learning apps are now more than ever before within the reach of students in all fields, especially in language learning. Students from all over the world can easily download these apps from secure cloud-based resources and have them installed on their phones in a matter of seconds. Chinnery (2006) did a research on the status of m-learning and the result indicated that in tasks which utilized

mobile phones for the purpose of vocabulary drill, quiz execution, live training, and email lesson content delivery, as well as on other tasks utilizing PDAs for sharing of the files, play backing of the video and text entry there were technological limitations such as “little, stumpy-resolution monitors (difficult for picture/film presentation), low audio quality, unusual text entry, inadequate storage/memory and low speed Internet connection. Nevertheless, thanks to the passage of time, now all these issues have been resolved and when it comes to smart phones it seems the sky is the limit.

2.5 Students’ Perceptions toward Mobile Phone

When introducing new technologies into the academic environment is discussed, the importance of students’ perceptions cannot be overlooked. Each individual brings with themselves a unique mixture of abilities, knowledge, socio-cultural background, experiences, personality and interests. Therefore, it is understandable that learners show different reactions to the adoption of mobile phone. They would approach the new technology differently on the basis of their interest, personality, skills and so on.

Sung and Mayer (2012) conducted a study on college students’ perceptions of and beliefs about the differences between mobile and desktop devices in both South Korea and the United States. The research was trying out to find out what criteria should be considered when it comes to designing new technologies for academic purposes. One crucial finding of the study was that the learners there are pre-existing perceptions which learners bring with them to the classroom. Subsequently, this perception affects their acceptance of mobile phone. One of the interpretations of the results pointed out to the fact that, these variations of the acceptance might be based on national variations of mobile phone usage in more general surroundings.

In a similar study, Cheon, Lee, Crooks, and Song (2012) came across similar results; They concurred that learners' beliefs and perceptions have an important role in their amount of acceptance for the new technological devices. Among other factors, their results discovered that usefulness and ease of use of mobile phone were among the most influential characteristics in the learners' eyes.

In another instance, Dahlstrom, Walker, and Dziuban (2013), after finishing their study on undergraduate students at university level, report the vital importance of mobile phone in education and further add that learners do have the expectation of their educators to incorporate mobile phone into their studies.

2.6 Self-Management in Learning

If the point is to discover the origin of self-management in learning, it is required to go back to (1986) When Bandura hypothesized, in accordance with social cognitive theory, that the choices, decisions, and actions which a student makes with regard to their learning are crucial to learning in a holistic sense. Since then, the way that learners are being perceived has changed drastically. More and more scholars have come to appreciate the role that learners play in the process of their own learning by being actively engaged and decisive. Zimmerman (2002) defined self-regulation and self-management as “the self-directive process by which learners transform their mental abilities into academic skills”.

According to Zimmerman, almost all students have some kind of idea of how to work and internalize information, however, only self-regulated learners are fully aware of their strong points and weaknesses and are willing to self-manage and take decisive measures to tailor a more suitable method for themselves. Nevertheless, we

should not undermine the role of teachers who can help students to develop their self-management skills. Teachers can be of great guidance to students in this regard by conducting activities such as homework assignments, goal setting, and strategy implementation.

On the contrary, Zimmerman suggested in his research that only few instructors actually provide their pupils with enough practice on the above-mentioned techniques. Therefore, it is significant to clarify that while there has been a shift in the way people learn and it has put more responsibility on the part of students, it is still the teachers who have to familiarize students with the self-management techniques.

Chapter 3

METHODOLOGY

This chapter includes the design of the research, instrument which is used for data collection, explanations about the population size, procedures undertaken for data collection purposes, how long the data collection procedures took, discussion of validity and reliability and last but not least, the method of data analysis.

3.1 The Philosophy behind the Research

Research has always been of great significance in the realm of education. In the last decades, thanks to the scholars who had made the progress in this field and put forward new perspectives. Researchers have seen great advances both in theory and application of it. Subsequently, these perspectives have been mingled with more traditional approaches in order to contribute to make new methods. As a result, now, more than ever before, the scholars can investigate the issues in the field of educational and social sciences more deeply and thoroughly.

These new perspectives and approaches assist us in gaining a deeper comprehension of the issues, research design and instruments that can be applied to certain research, and therefore enable us to better understand the nature of the topic we are working on, the participants who we are dealing with and the result we gather. Furthermore, the collection of information has become more reliable and even faster because of these new approaches.

The research philosophy that is adopted brings with it a collection of mindsets and assumptions. These mindsets will in turn help the researcher to pinpoint the method and as a result reach the kind of data which can answer the research questions, such as emphasized in this research study.

In this research, the methodology and techniques have been used in alignment with positivism philosophy because it allows for knowledge which is gained through observation. In addition, it allows for factual recording of information and translation through the objective method. As a result, the investigation's outcomes are capable of being qualified and observed. Positivism draws heavily on observations that can be quantified which in turn, depend largely on statistical analysis (Bryman, 1984). Nonetheless, according to positivism, the researcher's role is more independent.

3.2 Research Method

The most comprehensive way to gather data from large groups of participants selected and applied in this research was a survey method which was based on a quantitative approach. Quantitative approach renders a more impartial and unbiased body of results due to its objectivity. In order to obtain the objective result from a large number of students the researcher used a questionnaire. Questionnaires in general are more practical in order to acquire great amount of data from a large number of participants in a short length of time. In addition, one of the great perks of using a questionnaire is that because of its objective nature, the results will be more scientific.

3.3 Research Design

The researcher has used a descriptive quantitative approach for collecting data from a large group of university level students. The main focus was to apply objective

measurement to actualize the statistical data which was collected via a questionnaire. The researcher selected this approach in order to establish a link between the two variables which are a) the perception of the students towards using mobile phones for learning purposes and b) the criteria which they believe makes mobile phones an asset in academic environments. The survey was conducted face-to-face to ensure higher response rates.

3.4 Data Collection Instrument

The researcher used a questionnaire in order to collect the data because questionnaires offer a range of advantages such as: questionnaires offer a more scientific analysis, they introduce a more objective approach to data collection, the data obtained via a questionnaire can be used for comparing and contrasting, they are more practical, they need a short period of time to complete, improve validity and reliability regardless of who conducts them, large amount of data can be collected in a short time, the research can be done on large number of people, and they are cost effective and time saving.

Because of the above-listed upsides of questionnaires, the researcher decided to utilize a twenty-item-survey which covered the main issues related to the topic of this thesis. Therefore, a questionnaire which was used in an earlier research by Parajuli (2016) was adopted in order to assess the learners' perceptions on mobile learning activities, and behaviors on mobile learning.

The questions included in the questionnaire are classified into four types: the questions targeting the advantage of using mobile phone as a learning medium, the

questions targeting the disadvantage of it, the questions about learning, and the questions which are not related to any of the mentioned types.

3.5 Population

The information gathered in this investigation was gathered from 275 university level learners who had just started their bachelor courses in Eastern Mediterranean University. However, since EMU is an international university, these students needed to attend English classes in English Preparatory School in order to meet the criteria to attend their designated courses in their respective fields.

Therefore, the researcher selected the pre-intermediate and Intermediate-level language students as a suitable target for the research. From the 275 distributed questionnaires in ten classes, 225 responses were received.

3.6 Data Collection Procedure

In order to conduct the questionnaire, first the researcher had to acquire the approval from EMU's Scientific Research and Publication Ethics Committee which was granted by the approval letter. Secondly, for coordination with the English teachers, the researcher met with the assistant of the director in the language preparatory school. After a couple of meetings the researcher was provided with a timetable which indicated the hours, days and instructors' names of different English classes.

As a result, the researcher met with each instructor before the class started and arranged to conduct the survey in that particular class.

3.7 Data Collection Period

After receiving the approval from the Scientific Research and Publication Ethics Committee, the researcher got in touch with the authorities in the Language

Preparatory School and after a meeting it was announced that between 24/04/2017 until 02/05/2017 the researcher could conduct the survey.

3.8 Validity and Reliability

In order to ensure validity and reliability, the questionnaire which was used as a data collection tool, was adopted from an original article titled “Mobile Learning Practice in Higher Education in Nepal” written by Parajuli (2016) which was published in International Council for Open and Distance Education. Additionally, students’ own perceptions were taken into consideration.

3.9 Data Analysis

After collecting the data, the next step was to analyze it. In order to do that, SPSS version 24 was used. This version of SPSS is a full-featured data analysis package that is specifically designed to handle large or complex data. It can help researchers, data scientists by offering new capabilities including comparing data sets, eliminating costly sorting errors, automating tasks, and creating amazing visualizations, charts and graphs.

Different statistical tests were used for analyzing the collected such as the relationship between the questions and answers and the correlation between the questions were tested.

Chapter 4

FINDINGS AND DISCUSSIONS

This chapter includes the information regarding the collected data, the quantitative results, the categories of questions and their relevant analysis, the distribution of the questions and the relevant tables, the analysis of the ADV questions, DIS questions, LRN questions, NON questions, the general statistics of all the questions, and the correlation among the questions.

Total of 225 students were surveyed with the questionnaires. The questions are classified into four types: the questions targeting the advantage of using mobile phone as a learning medium, the questions targeting the disadvantage of it, the questions about learning, and the questions which are not related to any of the mentioned types.

Five out of 225 collected questionnaires were filled out randomly without any consideration, so the researcher removed them from the analysis. There were some questionnaires containing couple of unanswered questions. In statistical analysis such questions of the sample have been excluded and no value for missing answers has been assigned.

The 5-point Likert scale is used for answers with lowest value 1 as "Strongly disagree", mid-point 3 as "Neutral", and highest value 5 as "Strongly agree". The

software used for analysis and reporting is Statistical Package for Social Sciences (SPSS) version 24.

4.1 Quantitative Results

The sample population contains 220 students divided based on the level of the class they had been studying in. There were 121 students from pre-intermediate class marked by 103 and 99 students from Intermediate class marked by 104. The analysis is done with both categorical (103 vs. 104) and mixed (not related to class of students) conditions. Also, it considers the type of the questions as shown below.

Table 1: Classifying questions into four types

Type	Questions
Advantage (ADV)	1,8,9,15,16,17,18,19
Disadvantage (DIS)	7,14,20
Learning (LRN)	2,3,6,10
None of the above (NON)	4,5,11,12,13

4.1.1 Students' opinions about the advantages of using mobile as a learning medium

In this part the answers to ADV questions are analyzed by considering the means and standard deviations of answers shown in Table 4.2. Based on the Likert pointing system used the mean 3.0 shows being Neutral. Below this value shows the tendency to disagreement and above this value shows the tendency to agreement. Closer means to 5.0 show higher agreement and closer means to 1.0 show higher disagreement.

Standard deviation is used to evaluate that to how much extend the answers by the students are converged. Lower values show that more students have similar opinions and higher values show that the students have different opinions. Because in the Likert pointing system we used, the distance between each choice is 1.0 so standard deviations below this value for a question can be interpreted that the most of students have similar opinion whereas if the standard deviation is more than 1.0, it can be interpreted that students have selected different choices.

According to the statistical data gathered, the means above 4.0 and standard deviations less than 1.0 are highlighted in the table. Additionally, the data shows that means above 3 demonstrate the agreement of students regardless of the level of class on ADV questions (mean > 3.0).

Considering both classes (Pre-Intermediate/Intermediate), the students agreed on the same issue that mobile phones are effective to be used in classroom settings. This can be seen in table 2 (Descriptive statistics of answers to ADV questions).

Table 2: Descriptive statistics of answers to ADV questions

CLASS		Mean		Std. Deviation Statistic
		Statistic	Std. Error	
Pre-intermediate	Q1 (ADV) Mobile phones can facilitate learning.	4.08	.084	.922
	Q8 (ADV) Mobile learning can replace traditional face to face class.	3.58	.096	1.046
	Q9 (ADV) Mobile phone narrows down the digital divide existing in the country.	3.72	.095	1.026
	Q15 (ADV) If teachers allow me, I can use my mobile to learn better in class.	3.84	.104	1.132
	Q16 (ADV) I learned better when I use new technologies such as mobile phones.	3.98	.091	1.000
	Q17 (ADV) Mobile use in class can assist students with different learning styles to learn better.	4.02	.080	.873
	Q18 (ADV) Using mobile phone for learning is more convenient than using laptops.	3.82	.099	1.081
	Q19 (ADV) Mobile phones can be used almost anywhere.	4.02	.099	1.091
	Intermediate	Q1 (ADV) Mobile phones can facilitate learning.	4.11	.093
Q8 (ADV) Mobile learning can replace traditional face to face class.		3.41	.122	1.212
Q9 (ADV) Mobile phone narrows down the digital divide existing in the country.		3.40	.108	1.067
Q15 (ADV) If teachers allow me, I can use my mobile to learn better in class.		4.09	.090	.884
Q16 (ADV) I learned better when I use new technologies such as mobile phones.		4.13	.100	.991
Q17 (ADV) Mobile use in class can assist students with different learning styles to learn better.		3.89	.102	1.009
Q18 (ADV) Using mobile phone for learning is more convenient than using laptops.		3.65	.119	1.181
Q19 (ADV) Mobile phones can be used almost anywhere.		4.15	.094	.934

The distributions of all questions regardless of the class are shown in Figure 1. As it can be seen in more than 80% of students are agreed to Q1. For Q18 and Q9, just above 60% agree. Almost 75% of students are agreed with Q15 and Q17 and nearly 80% of them agree with Q16. For Q18, almost 65% of students agree and for Q19, almost 75% of students generally agree where above 40% of them strongly agree.

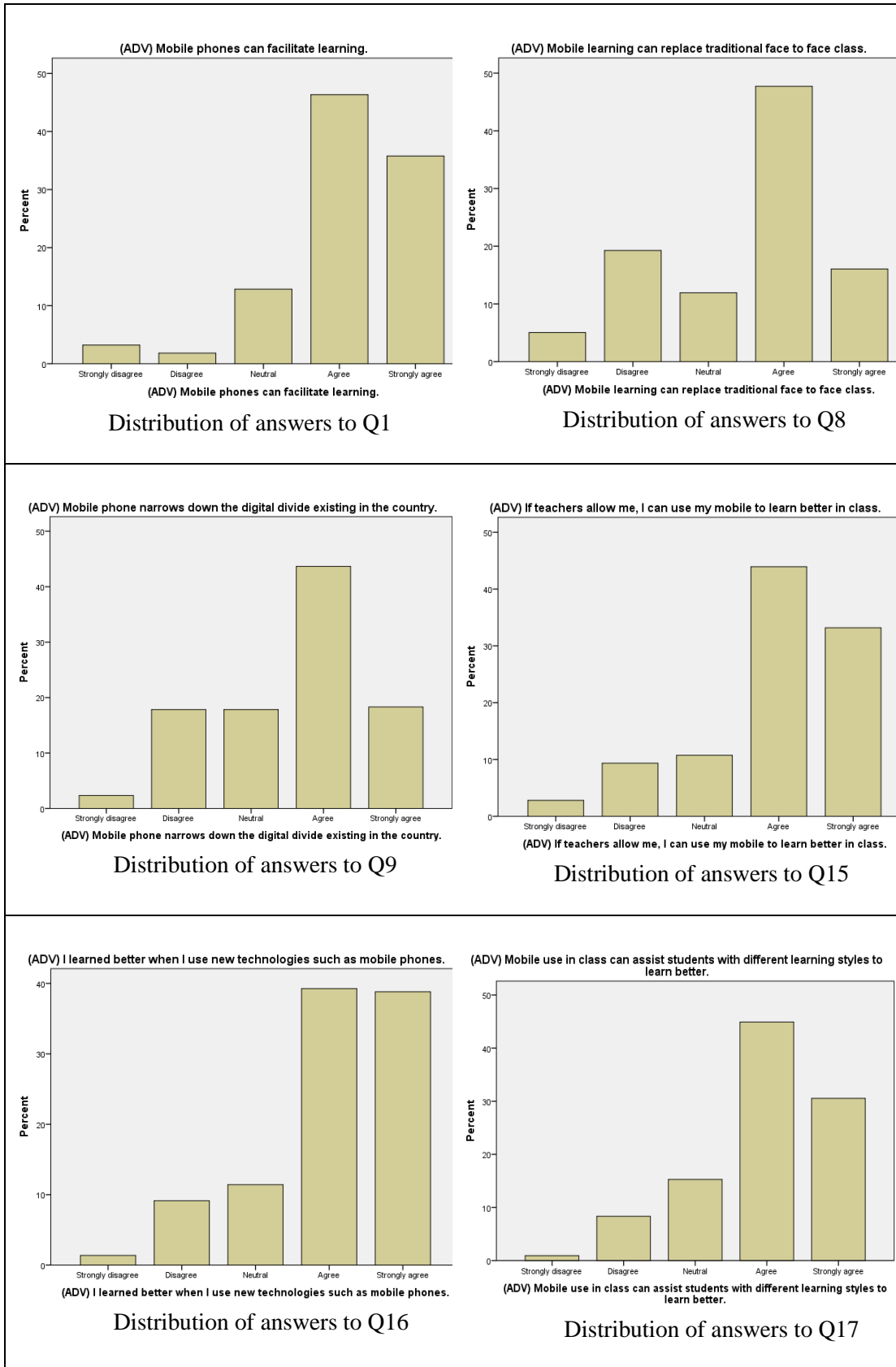


Figure 1: Frequencies of answers to ADV questions

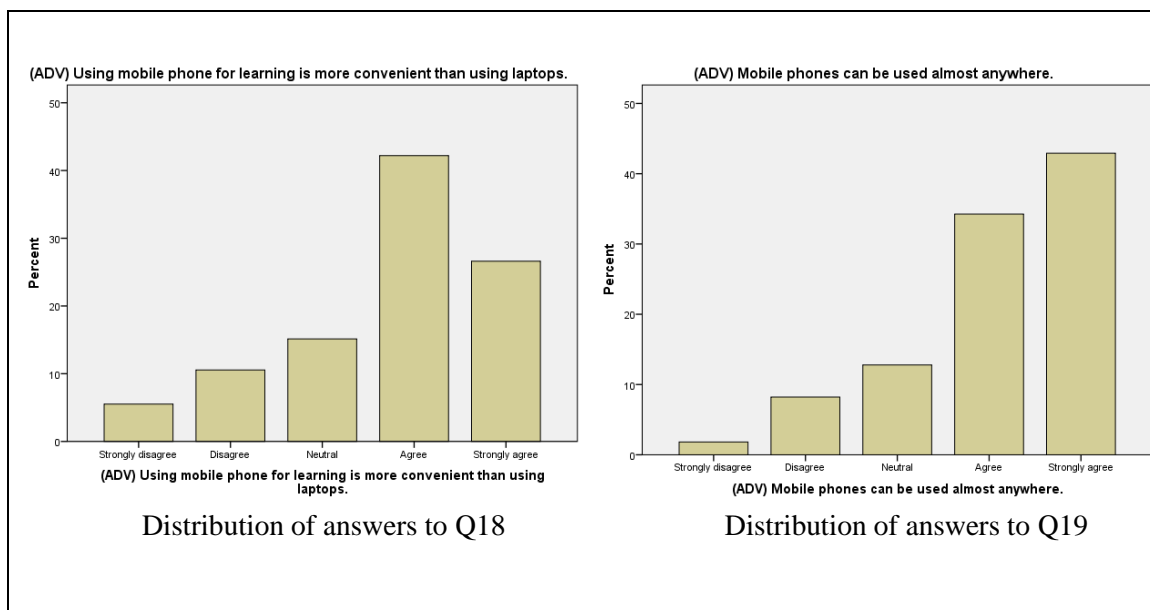


Figure 2 (cont'd): Frequencies of answers to ADV questions

4.1.2 Students' opinions about the disadvantages of using mobile as learning medium

Similar to ADV questions, the means and standard deviations of answers to DIS questions are analyzed. Table 3 depicts the statistics of answers about the DIS questions. As it can be seen means generally show disagreement or being neutral with this type of questions. However, because of high standard deviation (> 1) the disperse of answers are more than the ADV questions. No remarkable difference is seen between the classes in this statistic.

Table 3: Descriptive statistics of answers to DIS questions

CLASS		Mean		Std. Deviation Statistic
		Statistic	Std. Error	
Pre-intermediate	Q7 (DIS) Mobile phone hampers study.	2.86	.114	1.252
	Q14 (DIS) Teachers do not like it when I use my mobile in class.	3.41	.102	1.083
	Q20 (DIS) Using my mobile in class distracts me from learning.	3.21	.111	1.191
Intermediate	Q7 (DIS) Mobile phone hampers study.	2.75	.127	1.240
	Q14 (DIS) Teachers do not like it when I use my mobile in class.	3.73	.114	1.127
	Q20 (DIS) Using my mobile in class distracts me from learning.	2.81	.125	1.243

The distributions of all questions regardless of the class are shown in Figure 2. As it can be seen in the figure above 55% of students disagree with Q7 and only nearly 30% of them agree with it. For Q14, the answers show a normal distribution around the "Agree" choice. Generally, almost 50% of them agree, above 20% are neutral and the rest disagree. For Q20, almost 45% of students disagree, almost 40% disagree and the rest are neutral (Figure 2).

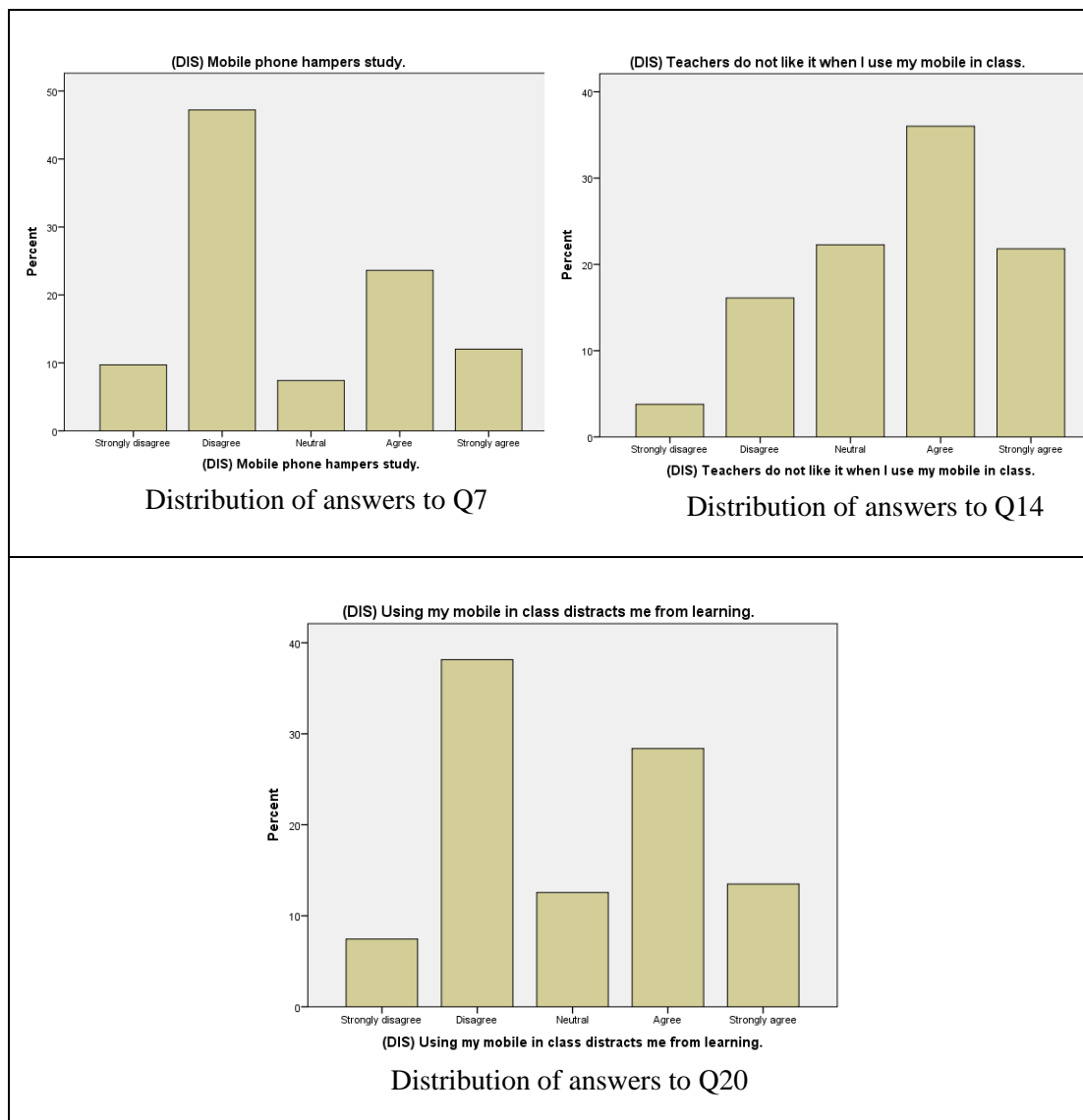


Figure 3: Frequencies of answers to DIS questions

By considering the frequencies it can be seen that most of the students agreed that teachers do not like to see students working with their mobile phones.

4.1.3 Students' opinions about the learning aspect of using mobile phones

Table 4 depicts means and standard deviations of answers about the LRN questions. The standard deviations less than 1.0 are highlighted in table 4. As it can be seen all the means are above 3 which means in average all the students regardless of their level of class agree with LRN questions (mean > 3.0). No remarkable difference is seen between the classes in this statistic.

Table 4: Descriptive statistics of answers to LRN questions

CLASS		Mean		Std. Deviation Statistic
		Statistic	Std. Error	
Pre-intermediate	Q2 (LRN) The campus administration should allow students to use mobile in the class for learning purposes.	3.89	.088	.959
	Q3 (LRN) The students need orientation/training for mobile learning.	3.86	.096	1.052
	Q6 (LRN) Teachers should guide students for effective mobile learning.	3.83	.094	1.024
	Q10 (LRN) Mobile learning should be integrated into formal education system.	3.82	.099	1.085
Intermediate	Q2 (LRN) The campus administration should allow students to use mobile in the class for learning purposes.	3.94	.108	1.077
	Q3 (LRN) The students need orientation/training for mobile learning.	3.82	.101	.998
	Q6 (LRN) Teachers should guide students for effective mobile learning.	3.67	.109	1.077
	Q10 (LRN) Mobile learning should be integrated into formal education system.	3.95	.091	.908

The distributions of all questions regardless of the class are shown in Figure 3. As it can be seen, the distribution of answers to Q2, Q3, Q6, and Q10 are similar. Most of the students agree with all the questions ranging from 65% to 75%. Almost 10% of them are neutral and the rest disagree (Figures 3).

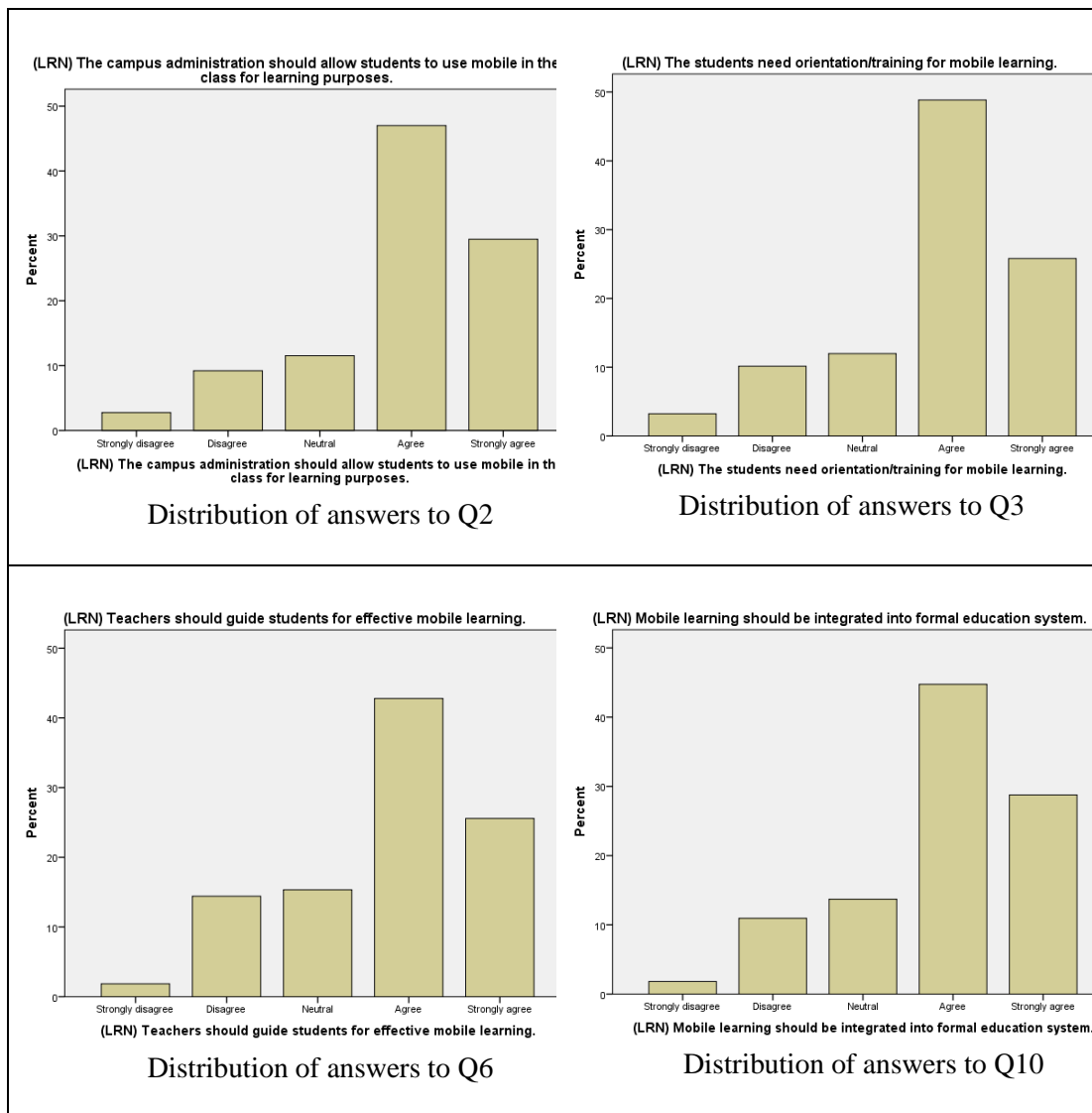


Figure 4: Frequencies of answers to LRN questions

Frequencies clearly show agreement of students about the LRN questions.

4.1.4 Students' opinions about the miscellaneous questions regarding mobile usage

Table 5 depicts means and standard deviations of answers about the NON questions. The means above 4.0 and standard deviations less than 1.0 are highlighted in the table. As it can be seen all the means except Q4's are above 3. That means in average all the students regardless of the level of class agree with NON questions except Q4 (mean > 3.0).

By considering the classes, it can be seen that Q5 and Q11 have the highest means among Pre-intermediate students; however the standard deviations are more than 1 in these cases.

Table 5: Descriptive statistics of answers to NON questions

CLASS		Mean		Std. Deviation
		Statistic	Std. Error	Statistic
Pre-intermediate	Q4 (NON) The campus administration should ban mobile phone use in the class.	2.80	.114	1.249
	Q5 (NON) Students will use mobile appropriately in the class if they are allowed to use.	4.00	.094	1.029
	Q11 (NON) Parents have positive attitude towards mobile use for learning.	4.03	.095	1.033
	Q12 (NON) Teachers have positive attitude towards mobile learning.	3.93	.088	.968
	Q13 (NON) In today's world, using a mobile phone is a necessity.	3.85	.088	.972
Intermediate	Q4 (NON) The campus administration should ban mobile phone use in the class.	2.47	.128	1.256
	Q5 (NON) Students will use mobile appropriately in the class if they are allowed to use.	3.73	.113	1.114
	Q11 (NON) Parents have positive attitude towards mobile use for learning.	3.68	.108	1.077
	Q12 (NON) Teachers have positive attitude towards mobile learning.	3.59	.110	1.092
	Q13 (NON) In today's world, using a mobile phone is a necessity.	4.06	.098	.977

The distributions of all questions regardless of the class are shown in Figure 4. By looking at frequency charts, it can be seen the students agree to the questions except Q4 i.e. "The campus administration should ban mobile phone use in the class"; however, disperse is high about this specific question.

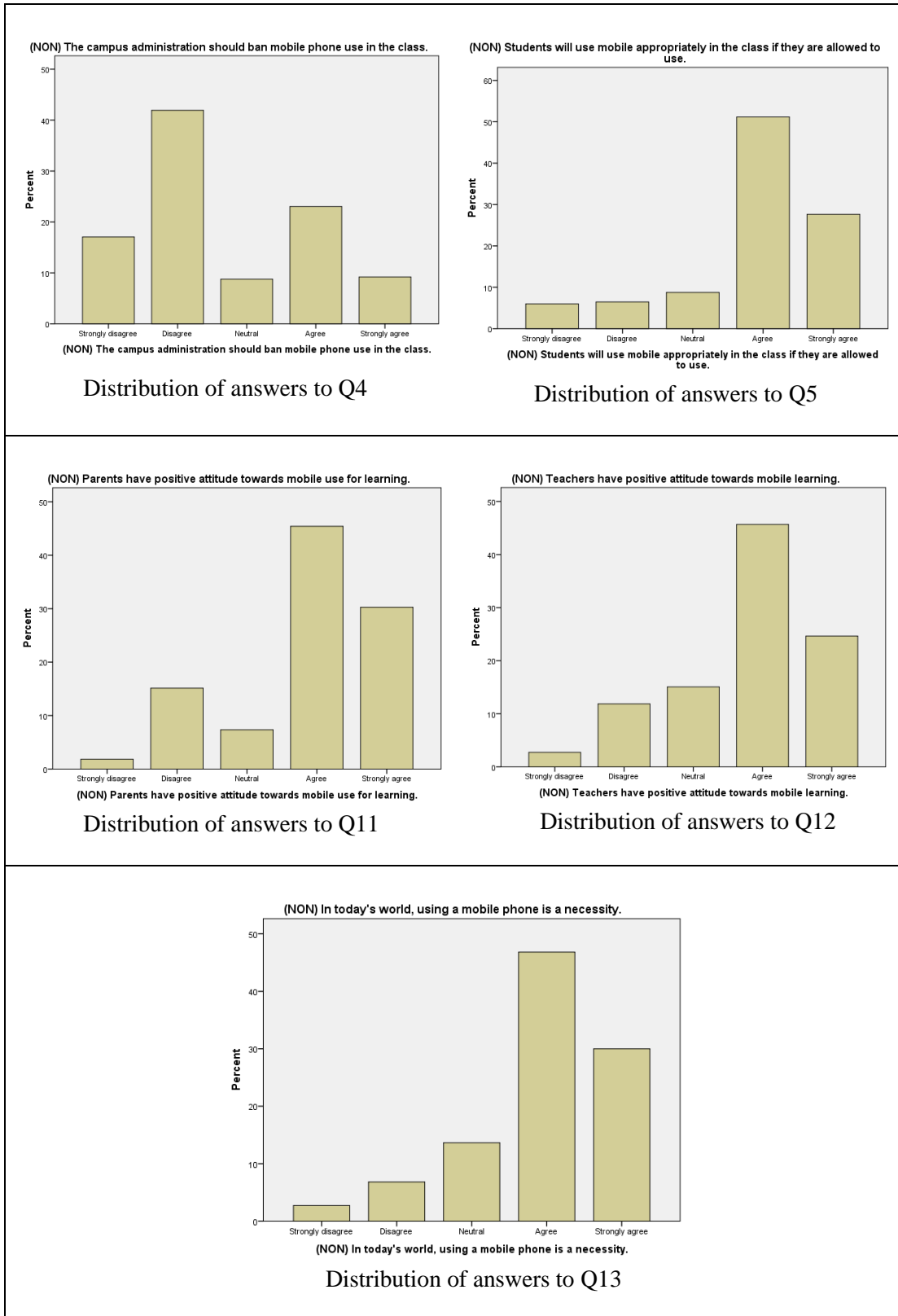


Figure 5: Frequencies of answers to NON questions

4.1.5 Perceptions of Students on the usage of Mobile Phones

Table 6 depicts the sum of points of questions w.r.t. classes and in total. In case of classes one should consider the difference in the number of participants in each group. Pre-intermediate students were 121 whereas Intermediate students were 99.

Table 6: Sum of points of questions

Questions	CLASS			
	Pre-intermediate	Intermediate	Total	Rank
Q1 (ADV) Mobile phones can facilitate learning.	490	403	893	2
Q2 (LRN) The campus administration should allow students to use mobile in the class for learning purposes.	459	390	849	6
Q3 (LRN) The students need orientation/training for mobile learning.	459	374	833	11
Q4 (NON) The campus administration should ban mobile phone use in the class.	339	237	576	20
Q5 (NON) Students will use mobile appropriately in the class if they are allowed to use.	480	362	842	10
Q6 (LRN) Teachers should guide students for effective mobile learning.	452	356	808	14
Q7 (DIS) Mobile phone hampers study.	343	264	607	19
Q8 (ADV) Mobile learning can replace traditional face to face class.	426	338	764	15
Q9 (ADV) Mobile phone narrows down the digital divide existing in the country.	432	330	762	16
Q10 (LRN) Mobile learning should be integrated into formal education system.	458	391	849	7
Q11 (NON) Parents have positive attitude towards mobile use for learning.	480	364	844	9
Q12 (NON) Teachers have positive attitude towards mobile learning.	475	352	827	12
Q13 (NON) In today's world, using a mobile phone is a necessity.	466	402	868	4
Q14 (DIS) Teachers do not like it when I use my mobile in class.	385	366	751	17
Q15 (ADV) If teachers allow me, I can use my mobile to learn better in class.	453	393	846	8
Q16 (ADV) I learned better when I use new technologies such as mobile phones.	482	405	887	3
Q17 (ADV) Mobile use in class can assist students with different learning styles to learn better.	478	377	855	5
Q18 (ADV) Using mobile phone for learning is more convenient than using laptops.	454	361	815	13
Q19 (ADV) Mobile phones can be used almost anywhere.	487	407	894	1
Q20 (DIS) Using my mobile in class distracts me from learning.	372	278	650	18

The last column Rank shows the ranking of the total from the highest to the lowest. As it can be seen Q19 "Mobile phones can be used almost anywhere" and Q1 "Mobile phones can facilitate learning" have the highest total points among the others that means most of the students agree with these statements.

Also, Q4 "The campus administration should ban mobile phone use in the class" has the lowest total point among others showing that most of the students disagree with the interception of mobile use by campus administration. So if we want to order the agreement points from highest to lowest we have Q19, Q1, Q16, Q13, Q17, Q2, Q10, Q15, Q11, Q5, Q3, Q12, Q18, Q6, Q8, Q9, Q14, Q20, Q7, and Q4. It can be noted that missing answers are excluded so that rank of questions with close totals, for instance Q19 (with 894 points) and Q1 (with 893 points), cannot be considered the same.

4.2 Correlation

In this section the correlation values between each pair of answer sets are computed and analyzed. A correlation value can be in the range -1.0 to +1.0 (both inclusive). Being nearer to +1.0 means that the changes in the answers are similar, being nearer to -1.0 means that the changes in the answers are in contrast i.e. higher agreement with one question leads to higher disagreement with the other question, and tending to zero means the answer sets are not correlated.

Figure 5 depicts the correlation matrix computed for each pair. As the correlation matrix is symmetric only the values below the main diagonal are shown in the figure.

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20
Q 1	1.00																			
Q 2	0.28	1.00																		
Q 3	0.35	0.24	1.00																	
Q 4	0.10	0.12	0.00	1.00																
Q 5	0.07	0.11	0.34	0.04	1.00															
Q 6	0.04	0.17	0.28	0.10	0.20	1.00														
Q 7	0.19	0.07	0.09	0.44	0.05	0.15	1.00													
Q 8	0.00	0.18	0.19	0.06	0.19	0.15	0.03	1.00												
Q 9	0.11	0.20	0.15	0.01	0.14	0.14	0.04	0.26	1.00											
Q 10	0.20	0.19	0.31	0.04	0.20	0.16	0.18	0.23	0.26	1.00										
Q 11	0.24	0.33	0.43	0.02	0.26	0.21	0.06	0.27	0.29	0.20	1.00									
Q 12	0.17	0.10	0.34	0.05	0.28	0.33	0.01	0.23	0.33	0.36	0.39	1.00								
Q 13	0.22	0.30	0.14	0.04	0.18	0.01	0.04	0.07	0.08	0.14	0.22	0.05	1.00							
Q 14	0.23	0.16	0.16	0.06	0.19	0.04	0.17	0.04	0.17	-0.27	-0.19	-0.27	-0.15	1.00						
Q 15	0.22	0.22	0.09	0.01	0.09	0.25	0.14	0.10	0.03	0.24	0.24	0.15	0.05	-0.01	1.00					
Q 16	0.23	0.35	0.21	0.30	0.23	0.22	0.17	0.15	0.13	0.30	0.20	0.11	0.31	-0.09	0.38	1.00				
Q 17	0.15	0.17	0.18	0.05	0.09	0.15	0.09	0.10	0.20	0.26	0.27	0.24	0.13	-0.10	0.27	0.39	1.00			
Q 18	0.19	0.27	0.29	0.20	0.35	0.19	0.19	0.21	0.22	0.26	0.37	0.23	0.24	-0.19	0.23	0.36	0.30	1.00		
Q 19	0.16	0.24	0.24	0.09	0.29	0.18	0.11	0.14	0.17	0.30	0.22	0.11	0.32	0.05	0.16	0.30	0.16	0.41	1.00	
Q 20	0.05	0.18	0.10	0.38	0.01	0.05	0.49	0.11	0.09	-0.22	-0.03	-0.11	-0.05	0.24	-0.14	-0.23	-0.11	-0.08	-0.03	1.00

Figure 6: Correlation between the questions

In general, based on the given answers neither strong positive nor strong negative correlation is seen between the questions. However {Q4,Q7}, {Q3,Q11}, {Q7,20}, and {Q18,Q19} are partially positive correlated together with approximate degree of 0.45, and {Q4,Q16} are partially negative correlated with degree of -0.30. The correlated questions' descriptions are shown in Table 7.

Table 7: Descriptions of correlated questions

Correlated Questions	Degree	Description
4,7	+0.44	Q4 (NON) The campus administration should ban mobile phone use in the class. Q7 (DIS) Mobile phone hampers study.
3,11	+0.33	Q3 (LRN) The students need orientation/training for mobile learning. Q11 (NON) Parents have positive attitude towards mobile use for learning.
7,20	+0.49	Q7 (DIS) Mobile phone hampers study. Q20 (DIS) Using my mobile in class distracts me from learning.
18,19	+0.41	Q18 (ADV) Using mobile phone for learning is more convenient than using laptops. Q19 (ADV) Mobile phones can be used almost anywhere.
4,16	-0.30	Q4 (NON) The campus administration should ban mobile phone use in the class. Q6 (LRN) Teachers should guide students for effective mobile learning.

Based on Table 4.8, the changes in the answers to {Q4, Q7}, {Q3, Q11}, {Q7, Q20}, and {Q18, Q19} are weakly similar and Q4 and Q16 are negatively correlated, however it is a weak negative correlation.

Chapter 5

CONCLUSION AND FUTURE WORK

5.1 Conclusion

The main aim of this research is to narrow the gap between the students and educators by providing proof that students have a clear understanding of the mobile phones and the academic value that these devices have to offer to facilitate and expedite learning. Moreover, educators can use the findings to design more student centered instructions taking into consideration the needs and interests of the students.

As a result of this research the following points were found:

- Regarding the first research question it was found that almost all the students, regardless of their current level of English, agree that technology in general and mobile phone in particular is effective in enhancing education. Therefore, the education authorities need to keep this fact in mind and try to utilize the relevant technologies according to the needs and interests of students.
- Therefore, instructional methodologies need to be in alignment with the needs and interests of the learners. In other words, as new generations happen to absorb more technological advances than ever before, the instructors in the education field need to keep up with the latest generation which is currently referred to as “Digital Natives”.

- In addition, students mostly agree that with the help of mobile phones it is possible to narrow the digital gap existing in the whole country. One of the features that almost all the students seem to see eye to eye is the fact that they feel that they are capable of managing their mobile use for academic purposes. In addition, they express a lack of satisfaction when the educators do not trust them to use their mobile phones in alignment with their studies.
- Considering the second research question, Students seem to have no doubts regarding the effectiveness of instruction when a new technology such as mobile phone supports instruction. The majority of students also agree that mobile use in class can assist students with different learning styles. In addition, they are of the belief that using mobile phones is far more convenient than other types of technologies such as laptops. Furthermore, they unanimously agree that mobile phones can be used literary anywhere.
- Another interesting piece of information based on the result indicated in this research is that students unanimously agree that the traditional approach to teaching must be replaced by a newer and more modern approach which incorporates mobile learning. Thus, it is crucial that the authorities in charge of education start to make great changes to the curriculum. Otherwise, the practicality of the traditional approaches continues to decrease as the new generations come to academic environments to learn.
- As for the third research question, it was found that the majority of students are of the belief that, the campus administration and teachers can enhance the

mobile use in academic environments by providing students with guidelines and suitable instruction which incorporates mobile learning.

- As mentioned before, the majority of the students are against the idea that the campus administration should ban mobile phone use in classes. Moreover, the majority of students agree that if the use of mobile phone is allowed, then it can be used appropriately in the class.
- Regarding the last research question, the findings suggest that although most students agree that using mobile phones in the classrooms does not hamper studying or distract them from learning, they believe that teachers do not like it when they use their mobile phones.
- Last but not least, in today's world, being able to utilize mobile phone to the fullest is a necessary skill which needs practice and guidance.

The results of this research unfolds that it is not enough to use a methodology in instruction that only works, but to allow students to get the most out of their education. There need to be a methodology that not only works but also allows the students to reach their full potential and functionality. Furthermore, by letting students use more authentic technologies, the education authorities can better prepare them for the challenges they might face after graduation.

5.2 Future Work

Although this research and many others have produced similar results in favor of the utilization of mobile phones in classrooms, it seems that in order to persuade the authorities in the field of education more research is needed. Especially, more

experimental research is needed to prove the practicality of utilization of mobile phones in academic environments.

REFERENCES

- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of social and clinical psychology, 4*(3), 359-373.
- Bryman, A. (1984). The debate about quantitative and qualitative research: a question of method or epistemology? *British journal of Sociology, 75*-92.
- Burston, J. (2016). Realizing the potential of mobile phone technology for language learning. *IALLT Journal of Language Learning Technologies, 41*(2).
- Chao, P.-Y., & Chen, G.-D. (2009). Augmenting paper-based learning with mobile phones. *Interacting with Computers, 21*(3), 173-185.
- Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012). An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers & Education, 59*(3), 1054-1064.
- Chinnery, G. M. (2006). archive. is. *Language learning & technology, 10*(1), 9-16.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*: John Wiley & Sons.

- Cui, G., & Wang, S. (2008). Adopting cell phones in EFL teaching and learning. *Journal of Educational Technology Development and Exchange (JETDE)*, 1(1), 6.
- Dahlstrom, E., Walker, J., & Dziuban, C. (2013). *ECAR study of undergraduate students and information technology*. Retrieved from
- Gulek, J. C., & Demirtas, H. (2005). Learning with technology: The impact of laptop use on student achievement. *The journal of technology, learning and assessment*, 3(2).
- Hagner, P. R., & Schneebeck, C. A. (2001). Engaging the faculty. *Technology Enhanced Teaching and Learning: Leading and Supporting the Transformation on Your Campus*: Jossey-Bass.
- Herrington, J., & Kervin, L. (2007). Authentic learning supported by technology: Ten suggestions and cases of integration in classrooms. *Educational Media International*, 44(3), 219-236.
- Jackson, A., Gaudet, L., McDaniel, L., & Brammer, D. (2009). Curriculum integration: The use of technology to support learning. *Journal of College Teaching and Learning*, 6(7), 71.
- Kukulska-Hulme, A., Sharples, M., Milrad, M., Arnedillo-Sánchez, I., & Vavoula, G. (2011). *The genesis and development of mobile learning in Europe*: Information Science Reference (an imprint of IGI Global).

- Malisch, S., & Montes, B. (2011). Loyola University Chicago: There's an App for That. *EDUCAUSE Review Online*, 34(1).
- Murphy, D., Walker, R., & Webb, G. (2013). *Online learning and teaching with technology: case studies, experience and practice*: Routledge.
- Oblinger, D., Oblinger, J. L., & Lippincott, J. K. (2005). *Educating the net generation*: Boulder, Colo.: EDUCAUSE, c2005. 1 v.(various pagings): illustrations.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the horizon*, 9(5), 1-6.
- Rickards, T. (2003). Technology-rich learning environments and the role of effective teaching *Technology-rich learning environments: A future perspective* (pp. 115-132): World Scientific.
- Snart, J. A. (2010). *Hybrid Learning: The Perils and Promise of Blending Online and Face-to-Face Instruction in Higher Education: The Perils and Promise of Blending Online and Face-to-Face Instruction in Higher Education*: ABC-CLIO.
- Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computers in Human Behavior*, 28(5), 1738-1747.

Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of computer assisted learning*, 21(3), 217-228.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, 41(2), 64-70.

APPENDICES

Appendix A: Questionnaire and Consent Form

Msc Student: Atefeh Abrash

Computer and Instructional

Technology in Teacher Education

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Supervisor: Asst.Prof.Dr. Bengi Sonyel

Faculty of Education

Department of Educational Sciences

0392-6302390

bengi.sonyel@emu.edu.tr

Questionnaire

Dear Students,

The purpose of this questionnaire is to collect data about students' perception of usage of mobile phones in the process of learning:

- To reveal students' perception regarding the appropriateness of mobile use in academic environments.
- To assess students' attitudes towards the self-management of mobile use.
- To reveal students' perception on educational value of mobile use and the facilities they can bring to learners.
- To suggest a new approach in blending the face-to-face instruction with mobile learning.
- To determine the pros and cons of mobile use for learning.

As a researcher, I would appreciate if you could fill in the questionnaire, which will only take 15 minutes. If you have any questions about any aspects of the questionnaire please don't hesitate to contact me. This is completely confidential and will not be used for any other purpose except this research.

Consent form for students

Dear Students,

If you have any inquiry about any aspect of the questionnaire please don't hesitate to contact with me or with my supervisor. If you are willing to participate please fill your name and surname in the given blank space and sign.

Name and Surname.....

Sign.....

Date.....

In the following questions, please mark your answers by putting a tick (✓) in the that corresponds to the extent you agree or disagree with each proposal.

Degree of agreement:

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree 5= Neutral

Statements						
		Strongly disagree	disagree	Agree	Strongly agree	Neutral
1.	Mobile phones can facilitate learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
2.	The campus administration should allow students to use mobile in the class for learning purposes.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
3.	Students need orientation/training for mobile learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
4.	The campus administration should ban mobile phone use in the class.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
5.	Students will use mobile appropriately in the class if they are allowed to use.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
6.	Teachers should guide students for effective mobile learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

7.	Mobile phone hampers study.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
8.	Mobile learning can replace traditional face to face class.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
9.	Mobile phone narrows down the digital divide existing in the country.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
10.	Mobile learning should be integrated in formal education system.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
11.	Parents have positive attitude towards mobile use for learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
12.	Teachers have positive attitude towards mobile learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

13	In todays' world, using a mobile phone is a necessity.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
14	Teachers do not like it when I use my mobile in class.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
15	If teachers allow me, I can use my mobile to learn better in class.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
16	I learn better when I use new technologies such as mobile phones.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
17	Mobile use in class can assist students with different learning styles to learn better.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
18	Using mobile phone for learning is more convenient than using laptops.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
19	Mobile phones can be used almost anywhere.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
20	Using my mobile in class distracts me from learning.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

Appendix B: Permission for Initiation of the Research

 <p>Doğu Akdeniz Üniversitesi "Uluslararası Kariyer İçin"</p>	<p>Eastern Mediterranean University "For Your International Career"</p>	<p>P.K.: 99628 Gazimağusa, KUZEY KIBRIS / Famagusta, North Cyprus, via Mersin-10 TURKEY Tel: (+90) 392 630 1995 Faks/Fax: (+90) 392 630 2919 bayek@emu.edu.tr</p>
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Etik Kurulu / Ethics Committee

Reference No: ETK00-2017-0059

24.03.2017

RE: Atefeh Abrash (15500090)
Department of Information and Communication Technologies
in Education

To Whom It May Concern,

As part of the 2016-2017 Spring Semester, pertaining to Master Thesis questionnaires EMU's Scientific Research and Publication Ethics Committee has granted Ms. Atefeh Abrash (15500090), from the Department Information and Communication Technologies in Education Master Graduate Program, to pursue with her survey entitled **Perceptions of Intermediate Level Preparatory Students Towards Using Mobile Phones for Learning Purposes as a Vital Supplement for Their Academic Curricula: A Case in Eastern Mediterranean University to Discover the Self-Management Awareness** This decision has been taken by the majority of votes. (Meeting number 2017/39-38)

Regards,



Assoc. Prof. Dr. Şükrü Tüzmen
Director of Ethics Committee

ŞT/sky.

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Appendix C: Request Letter for the Research in FLEPS

To: Asst. Prof. Dr. Ramadan Eyyam

FLEPS Director

From: Atefeh Abrash 15500090

Subject: Request for conducting a questionnaire

Date: 03/04/2017

I would like to kindly request permission to conduct a survey on the “*Perceptions of students’ towards using mobile phones in Preparatory School in the Course entitled 104*”. After I have received my approval from the EMU’s Scientific Research and Publication Ethics Committee with the reference number ETK00-2017-0059 dated 24/03/2017, as a researcher I have decided to apply for the Foreign Language and Preparatory School in order to conduct my research for the purpose of my Msc studies.

My topic for this research is “*Perceptions of University Level Students towards using Mobile Phones for Learning Purposes as a Vital Supplement for their Academic Curricula: A Case in a Multinational Environment*”. In order to conduct this research, the researcher needs to apply a paper-based questionnaire. The instrument which is used in this research contains 20 items which are measured according to the Likert scale. The majority of the questions are on the topic of new instructional technologies in general and mobile phones in particular. The questionnaire is adopted from the article of Parajuli (2016).

The aim of this research is to explore the perceptions of students’, their understanding of the role of the educational system in general and teachers in particular in their efforts towards making a more facilitated and modern environment using the cutting-edge technologies. If you consider my application to carry out this research in Foreign Language and Preparatory School at your earliest convenience, I would appreciate a lot.

Thank you in advance for your kind consideration.

