The Level of Lecturers' Competency of Utilization Computer Technology in Libya: An Example Faculty of Education in Misurata University

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ABSTRACT

The main purpose of this study was to determine the competency level of Libyan lecturers of using educational technology particularly computer technology at Misurata University, also, this study interested in exploring the willingness of lecturers of integrating technology in teaching and learning process. Moreover, the study focused on two areas in computer technology: the use of application software and the use of the internet. The participants of this study involved 103 Libyan lecturers who work in Faculty of Education at Misurata University, 48 of them were males and 55 were females. Furthermore, this study was quantitative and for collecting the data, the questionnaire was used. Additionally, the data were analyzed by using frequency, descriptive analysis technique, percentage, and one-way ANOVA.

Moreover, the finding of this study found out that the lecturers have a different level of using computer technology. Most lecturers have experience in using the computer in general yet only some of the lecturers use the computer and the Internet to improve their performance in teaching, but the majority of lecturers do not use computer technology as an educational tool that's because there is no enough support from the university. The study also found that the difference was not too big between the levels of lecturers in using the internet in their teaching, while there was a significant difference between the levels of the lecturers in using application software of computer technology.

However, the study found the participants are realizing the significance of using technology in education and they are willing to integrate the technology if they obtain adequate support.

Keywords: Computer technology, the internet, software application, lecturers' level, educational technology.

ÖZ

Bu çalışmanın temel amacı, Libya öğretim elemanlarının eğitim teknolojisini özellikle bilgisayar teknolojisini Misurata Üniversitesi'nde kullanma yetkinlik düzeyini belirlemekti. Ayrıca, çalışma bilgisayar teknolojisinde iki alana odaklanmıştır: uygulama yazılımı kullanımı ve internet kullanımı. Bu araştırmanın katılımcıları, Misurata Üniversitesi Eğitim Fakültesi'nde görev yapan 103'ü Libya, 48'i erkek, 55'i kadın olmak üzere 103 Libya öğretim görevlisini içeriyordu. Ayrıca bu çalışma niceldi ve veri toplamak için anket kullanıldı. Ek olarak, veriler frekans, tanımlayıcı analiz tekniği, yüzde ve tek yönlü ANOVA kullanılarak analiz edildi.

Ayrıca, bu çalışmanın bulguları, öğretim elemanlarının bilgisayar teknolojisini kullanma düzeylerinin farklı olduğunu bulmuştur. Çoğu öğretim üyesi, bilgisayarı genel olarak kullanma konusunda deneyime sahiptir, ancak yalnızca bazı öğretim üyeleri, bilgisayarları ve interneti öğretimdeki performanslarını artırmak için kullanırlar, ancak öğretim elemanlarının çoğu bilgisayar teknolojisini bir eğitim aracı olarak kullanmaz, çünkü yeterli destek yoktur. üniversiteden. Çalışmada, öğretimde interneti kullanmada öğretim elemanlarının düzeyleri arasındaki farkın çok büyük olmadığı, ancak bilgisayar teknolojilerinin uygulama yazılımlarını kullanmada öğretim elemanlarının düzeyleri arasında anlamlı bir fark olduğu bulunmuştur.

Ancak çalışma, katılımcıların eğitimde teknolojiyi kullanmanın önemini fark ettiklerini ve yeterli destek elde ettiklerinde teknolojiyi entegre etmeye istekli olduklarını ortaya koymuştur.

Anahtar Kelimeler: Bilgisayar teknolojisi, internet, yazılım uygulaması, öğretim üyesi düzeyi, eğitim teknolojisi.

DEDICATION

With pleasure I dedicate my work to:

- My generous husband Moftah Abodabbos, who carried with me a lot and was the first supporter and motivator to achieve this success, and my pretty kids, Adam and Alen.

- My beloved parents, brothers, and sisters for their constant encouragement.

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Chapter 1

INTRODUCTION

Technology has become extremely important in education it plays a significant role in how we interact and receive the information its role has challenged the traditional method of education where teachers control the learning process and students just receive information. The use of technology has increasingly impacted interaction and communication in the world. Therefore, technology makes learning process easier and enhances students' performances through engagement, cooperation, feedback, and interaction. The availability of classroom equipment to be used by both teachers and learners has a great effect on improving teaching.

Furthermore, the rapid growth of educational technology (Cheung & Slavin, 2012) makes it necessary for teachers to integrate technology into the teaching process also, due to educational needs that have increased in the classroom, teachers have been facing difficulty to reach each learner without the aid of technologies (Ysseldyke et al., 2003). Consequently, technology will have a positive effect on a teacher's perception if they use it in the classrooms (Ertmer & Ottenbreit-Leftwich, 2010). If the technology is not available in classroom, teachers may not have the chance to develop the method of teaching by using technology as teaching and learning tool. Moreover, teachers' perceptions are often negatively impacted due to the insufficient use of technology in the classroom (Ertmer & Ottenbreit-Leftwich, 2010).

Computer technology is an example of technologies used in education. The computer has become one of the most widely used innovations in our modern world. It enabled humans to accomplish a lot of things which were impossible to achieve without the support of computer technology (Moeller & Reitzes, 2011).

Integrating computer technology into education is very important; especially at higher education levels and usage of technology tools such as a computer may lead to the achievement of several educational goals and contributions in improving the system of education as a whole. The positive attitudes of teachers toward using computer technology are very important and necessary for using information technology effectively in the classrooms (Woodrow, 1992), and because of the important role of computer technology in education, the teachers are at the heart of education reform, thus, it is extremely important to give them an opportunity to improve teaching through utilizing technology (Danwa & Wenbin, 2010). Hence, lecturers can take features of the available technology to increase students' knowledge through videos and interactive lessons, however, the success of integrating computers into learning mostly depends on teachers' decisions about how to use technology in their classrooms (Teo, Lee, & Chai, 2008). In order to be successful in integrating technology in education, teachers need to be competent in using computer technologies. Students and teachers need to use computer technology and its applications to link the technology to their education such as the internet, word processing, contact through email and so on, that can help both teachers and students to gain various learning styles (Mims-Word, 2012).

1.1 Problem Statement

In Libya, students do not have to pay money for education; it is free from primary to post-graduate levels. Additionally, students may get full scholarships to pursue their education (El Zoghbi, Suresh Kumar, & Naidu, 2010). In Libya, the education system has several levels; the first nine years are compulsory which involves 6 years of elementary level and 3 years intermediate level, the second three years are high school or vocational centers, students can choose which one they prefer and after they get a diploma, they can progress to Graduate studies (Bukhatowa, Porter, & Nelson, 2010).

However, Libyan education is still weak, that is because some Libyan universities continue to use traditional education, non-technological classrooms as the only place to learn, receive materials and meet face-to-face with lecturers and classmates. Lecturers have to change their ancient ways of teaching.

So, the main problem in Libyan education is that it relies on traditional educational methods of the lecture by instructors. Therefore the educational system in Libya needs to be developed, updated technology, and integrated into classrooms that will enhance and improve the system of education as a whole. There are many studies carried out by researchers about using computer technology and integrating this technology in classrooms. However, the studies which have been conducted by Libyan researchers about education technology are limited. Moreover, no study has been done to determine the competency of lecturers in using computer technology in teaching at Faculty of Education at Misurata University.

1.2 Purpose of the Study

The use of educational technology especially computer technology has a significant role to achieve goals in the teaching and learning process. The main aim of the proposed thesis is to identify the current level of lecturers' competence in using computer technology in two areas: the use of application software and the use of the Internet. The study also aims to provide a clear idea of whether teachers have awareness of integrating computer technology into the teaching and learning process and find out how often the lecturers use computer technology. The research may provide the required information for creating professional development workshops to train lecturers and provide them with the ability to use these technologies in education. All participants will be Libyan lecturers who work in the Faculty of Education at Misurata University (Libya).

1.3 Research Questions

The questions of research are prepared to seek information about the competency of lecturers in using computer technology in the Faculty of Education in Misurata:

1. What is the competency level of lecturers in using computer technologies?
2. What can lecturers use to integrate computer technology at Education Faculty?
3. Does the skill level of Libyan lecturers differ across the two competency areas of using application software and using the internet?

1.4 Significance of the Study

There has been rapid growth over the past several years in the use of computer technology and the Internet to facilitate learning and teaching processing in many institutions around the world. However, the Arabic territory, specifically Libya, is still using traditional instruction methods (Rhema, Miliszewska, & Sztendur, 2013).

Therefore, evaluating lecturers' competencies in the utilization of computer technologies may provide the required information for creating professional development workshops to train lecturers and furnish them with the ability to use these technologies in teaching. The findings of this thesis may assist administrators in building a vision for integrating technology into Libyan higher education classrooms to support lecturers' levels of ability in using classroom technology. Moreover, participants will be given a chance to evaluate their own competence with the use of computer technology. This study may promote and increase the awareness of participants about the importance of technology and its use in their classrooms.

1.5 Scope and Limitations

In this study, the quantitative research method is used and the data collection is limited to the Education Faculty at Misurata University 2019-2020 Spring Semester. The research is limited to Libyan lecturers at the Faculty of Education at Misurata University. 103 lecturers are used as a sample and the data is collected by filling a questionnaire.

There are some limitations to this study:

- A limited number of responses may have lost from the lecturers since it is voluntary participation.
- The participants may give biased responses to some survey items.

1.6 Definition of Terms

Definitions of some items which have been used are as follows:

- **Competency:** It is a set of knowledge, skills, and abilities that we can observe and measure in the attributes of a person who is doing a specific job or task.

These competencies can contribute to improving the performance of lecturers and the educational system in the institution as a whole.

- **Technology:** Technology is the skills, knowledge or modern methods and techniques that are used to achieve goals or provide services. Using technology makes our life better and easier (Ayas, 2006).
- **Educational Technology:** "Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources". (Richey, 2008).
- **Computer Technology:** In this study computer technology refers to the computer as a technology instrument that is used in teaching and learning by educators and learners inside the classroom or outside it.
- **Lecturer:** "A person who provides instruction or education, in this study, an educator is defined as a teacher who teaches students in higher education". (Ilham, 2018, p. 15).
- **Higher Education:** It is the instruction after high school, this level of education teaches in universities or colleges.
- **Software:** For the aim of this research, the software is all instructions, data, and programs on the computer which used to operate the information system.

Chapter 2

LITERATURE REVIEW

2.1 Libya Education System

Libya located in Northern Africa, it is an Arabic country, and Tripoli is the capital of Libya many people in Libya can understand two languages (Italian and English) especially in bigger cities (Benghazi, Tripoli, and Misurata). The land area of Libya is around 1,759,540 sp km (Khashkhush, Eaton, Elmsallati, & Elferjani, 2011). Additionally, the population of Libya is 6.8 million roughly; the students from this population are 1.7 million, the majority of the students over 270,000 study in higher education (Hamdy, 2007). Libyan education is free no need to pay money to gain education from the primary level until under graduation from university, the first primary stage 9 years is compulsory, then there are 4 years of high school, thereafter students proceed to higher education.

Moreover, the system of higher education in Libya consists of a variety of foundations, higher education requires 4 years full time to complete this stage level of study (Bukhatowa et al., 2010). In Libya, there are public universities and private universities, and vocational and technical institutions (Arabsheibani & Manfor, 2001). The government predominantly finances higher education; however, the students have to pay a small fee at the beginning of the year in public universities because it is subsidized, but in private universities, students must pay all fees to get their education.

Figure 1: Location of Libya

In study Hbaci (2018) concluded that educational technology is extremely important in higher education in Libya, Libyan universities still facing some challenges in implementing educational technology. Unfortunately, traditional education is still used in the system of Libyan education (Hbaci, 2018). Improving the services of quality education and update educational methods is one of the challenges face Libyan universities, it is important for providing teachers a good training and adopt technology in their teaching besides providing infrastructure (Bukhatowa et al., 2010).

In their study, Danwa and Wenbin (2010) proposed that instructors have to develop learners how they deal with technology to use it and in addition to guide the learners to the environment of varied technology. Educators in Libya need this chance to get expertise in the education section. The role of teachers is very important in implementing technology in their teaching because they are in the heart of the

education process reform so they need opportunities to enhance using technology in education (Danwa & Wenbin, 2010).

Also, Rhema and Miliszewska (2010) said that Libya is still in the early level of using technology in education similar to developing countries, although the universities in Libya are using old education method there are some universities which consider the biggest in Libya such as Benghazi University, Tripoli University, and Academy Studies of Postgraduate use the basic technologies like computers devices and access of the internet.

Similarly, Mapuva (2009) mentioned that the old educational experiences of developing countries based on the traditional method and less of resources led to the hardness to accept and adopt technology in education.

Bukhatowa, Porter, and Nelson (2010) explained that providing the chance for teachers to get the required expertise is a significant challenge facing Libyan education. Despite the efforts of the Libyan government to provide the educational system with computer technology, there are still challenges to integrate technologies in education those challenges restricted access to the internet and shortage the number of teachers who can use technology, especially computers. However, the government in Libya looks up to develop the system of higher education and its quality by using modern learning and teaching methods (Bukhatowa et al., 2010). Furthermore, many teachers agree that there are difficulties in Libyan universities face students which limited the use of technology in the education process.

2.2 Computer Technology in Education

The American Heritage Dictionary (1980) defined the computer as " a person who computer" this was the first definition of a computer. In a modern study, Hbaci (2018) defined computer technology as advanced technology, using the software application and the internet between instructors and learners in classrooms to provide various educational materials.

In recent years, several areas such as communication, technology, and media have increased of using computers and the internet to integrate the technologies in our life, however, the use of technology like computer technology and the internet are not popular in every educational field (Tinmaz, 2004).

Moreover, many universities have a strong motivation to use computer technology in their education, despite some of the colleges have the expertise about computer and how to use it in the classroom, faculties members still try to integrate this technology in their educational methods and beat the barriers face them (Jacobsen, Michele, 1998), it is absolutely essential for educators to have positive attitudes toward technology in order to feel comfortable when using computer technology, which will aid teachers to use the computer effectively (Milbrath & Kinzie, 2000). Because of the importance of computer technology, it should be a part of the education system. Also, it is likable to use computer technology to improve the teaching method that will help students' understandable via attractive demonstrations (Guney, 2015).

Al-obiedat (1994) explained that the use of computer technology is very useful in education, but there are some problems in implementation technology in classrooms. The difficulties are about limited funding, there are no enough training courses and

software, attitudes of using computers is poor and lack technical supporting of technology from schools. However, the leaders who will buy modern technology and integrate this technology in education have to have enough knowledge about the needs of software and hardware. nevertheless, using modern computer technology is not always a good decision for all educational programs (Al-obiedat, 1994).

2.3 The Importance of Integrating Technology in Education

Nowadays technology is very important, it exists in all fields of our life especially in education. (Milbrath & Kinzie, 2000) However, the majority of the teachers do not integrate technology into their classrooms in an effective way. Therefore, teachers should shed light on how they can decision using technology to achieve the integrated (Ertmer, 2005). The interaction, attitudes, and beliefs of teachers toward education process impact on integrating technology(Cuban, Kirkpatrick, & Peck, 2001).

In recent years integrating technology in the education process has become very significant, particularly in a higher level of education. Al-Alwani (2005) states “the importance of information technology in today's world cannot be denied, and educators are aware that information technology is already an important force in modern education. Technology is found in schools everywhere, represented by different tools and instruments”(p. 2). Technology can furnish learners with perfect visuals that improve the imagination of them and facilitate their learning, so technology is a strong tool that uses in developing education.

Dias (1999) defined technology integration as the utilization of technology for supporting and implementing the goals of the curriculum to help learners to be more

engaged in the process of learning. Software and hardware of the computer are significant to integrate technology besides the attitudes of teachers about the teaching process (Ertmer. P.A., 1999) that play a great role in how they may integrate tools of technology in instructing.

Cuban (2001) confirmed that most establishments often use computers to complete the role of teaching in traditional classrooms but there is no effective technology integration in daily practices. Thus, educators and directors have to pay attention to the importance of integrating technology by determining suitable methods for teachers and students.

The technology can help to achieve educational goals via two methods:
First, remove any physical barriers for learning. Second, concentrate on using the knowledge not just keep it. Checking each method to examine its value and impact in the education environment that according to its relation to teachers and students (Courville, 2011).

In a study, Courville (2011) explained that technology plays a great role in several fields in education, in particular, technologies have a significant effect and utility on the environment educational these educational technologies improve and develop the experience of education in learners and instructors. Moreover, using technologies continuously have powerful and positive effects on enhancing and developing teaching and learning, additionally, to get great earnings in education to have to be evolved the current trends of education (Courville, 2011).

2.4 Related to the Study

Since computer technology starts using in the education process, many researchers have been conducted studies about it to discover the role of computer technology in improving and develop the learning and teaching for teachers and students, also to determine the competency level of teachers to use this technology. This part focuses on previous studies and their results related to using computer technology and teachers' level of utilization computer.

This investigation conducted by Campbell (2002) about the advance of members' faculty selected at educational schools when they have learned technologies related to utilizing computers. The study searched some changes about using technologies such as the attitudes, resting, and teaching influence with mention to the level of skill and adoption. Moreover, the interviews individual were used with the members of faculty in getting information on the barriers faced by members of faculty. This study showed that there is a difference in choices that are taken by faculty members related to use the computer. However, the similarity was across levels of the adopter in using and learning computers.

Isleem (2003) carried out a study to determine the level of educators in the use computer for educational goals in public schools in Ohio, and the research explored the relationship between level the use and some chosen factors such as expertise, attitudes, access, supporting and characteristics of teachers. Additionally, there is a relation between the utilization level of computers and the access of teachers to the computer. The number of participants in this study was 1170 teachers who work in Ohio public schools. This study found out that the teachers of education technology

have a rising level of using a computer in the main uses of computers. Moreover, there is a strong relationship between computer level using and the expertise and attitudes of teachers in using tools of computers.

Shafiei (2005) researched factors that aid teachers in developing their abilities to integrate computer technology in the teaching. The aim of this study was to investigate the use of computer technology by teachers and the variables which impact positively or negatively on using this technology in teaching at community college faculty. Additionally, the research investigated the impact of using and training the computer on the teaching. The case study and adoption model has been used in this study. Qualitative data collected by interviewing and observing the training on computers. Moreover, 12 faculty members who work full time participated in the study; those teachers attended two activities are least related to computers in five years ago. The results of the study found that there was a little relationship between the participation of training in computers and integration of computers in teaching. The data showed that the training and use of computer technology both changed the strategies of teaching, furthermore, most of the members who participated in the study preferred training based on their pedagogical interest.

In another research was conducted by Eyadat (2006), this investigation explored the attitudes of educators and learners at the University of Jordan in 2005 to use computer technology. 150 teachers and 700 students at Jordan University were the participants of this study. In general, there were positive attitudes among students and teachers about computer technology at Jordan University, the research found out that the learners and teachers who used to use computer technology frequently had

positive attitudes toward using technology. However, there were negative attitudes about computer technology from students and teachers who did not access to computers. The study showed that the worried which the teachers have with computer technology decrease when their dealing knowledge and experience with computers increase.

Deniz (2007) carried out a research on teachers' experiences and their attitudes of using a computer, the research aimed to examine the attitudes and the experience of teachers about utilizing computers and the relation between both of them in Turkish schools. The participants in the study were 90 teachers.

Additionally, the results of the research were outlined in 3 parts:

1- The majority of teachers 62% have a computer in their home.

2- Half of the teachers 50% have computers for less than 3 years.

3- The investigation also found no difference between gender and attitudes of the computer.

Furthermore, there were some differences between attitudes toward computers in general and computer's admiration attitude according to their competency in the use of the computer.

Taghreed (2009) carried out a study which aimed to look at the use of computer technology by members of female faculty and their perception toward using computers also this study focused on the barriers which make them don't use computer technology a lot by females in colleges in Saudi Arabia at Dammam and

Jubail. 206 of female teachers participated in the research but there were 197 questionnaires that were usable.

The results of this study that the girls' members of faculty had a high level of using computer technology in common applications such as e-mail, internet, and word processing. Moreover, the finding showed that there were positive views from female faculty members' toward the use of computer technologies in faculty.

Furthermore, the barriers that limit using technology were the decrease in technical support and efficient training and lack of infrastructure and administrative support. the use of computer technologies had an effect on girl faculty members' because of the demographic factors such as age, the experience of using computer technology by years, teaching experience, access to the internet at home, skills level of computer and competence of the English language.

In his study Latio (2009) carried out research on the factors impacts on teachers' attitudes of computer technology. This survey focused on educators in Ohio high schools and determined their use of computer in classrooms also the study found out the barriers of integrating computer technologies into classrooms. The random sample of this research was 256 educators who chose from 18 schools. The finding of this research proposed that access to computers by teachers is restricted because of the limited availability of computers in classrooms. Therefore, the lack usage of computer technology significantly in teaching and learning is the main barrier toward integrating computer technologies in school curriculums.

Zuniga (2009) carried out a study on the perspectives of teachers on the existing state of computer technology integration into public school classrooms. The participants were 10 teachers they were selected from three areas 3 elementary, 3 middle and 4 high schools. The study aimed to paycheck on and understands the perspectives of teachers related to the integrating of computer technology into public school classrooms. Moreover, the qualitative method was used during the collection of the data; supplemental data were collected via a questionnaire. The findings of this study showed that full integrating of technology into the general public schoolroom has yet to occur and taking part in this study have all indicated that the combination of computer technology in the public school classrooms may be a high priority.

A survey was researched by Bataineh (2013). It designed to investigate the attitudes of social studies' teachers and their competency toward apply technologies in seventh to twelfth classes at Jordan. The research focused on the teachers' perceptions and their attitudes to implement technology with the competency in classrooms. 221 educators participants who work in 110 schools, most of them were male 135 and the rest 86 were female. The finding of this study found out that the educators who have high positives attitudes about using technologies in the classroom had a high competency for applying the technology in teaching. However, there is a difference between male and female teachers; the young males had well attitudes more than the young females while the oldest teachers were less positively toward using technology.

According to Elshaikhi (2015), the study discovered the perceptions of Libyan educators about using information technology in higher education and the barriers that may face and impact the educators to limit of using the technology in education

at Benghazi University. The sample size of educators at Benghazi University was 183 lecturers, divided into two parts 76 of them males were and 107 were females. Consequently, the results of the study showed that most of the educators' faculty at Benghazi University did not have many experiences of using information technology, however, the lecturers are ready to use information technology if they can get more opportunities to access to information technology to use it in education. Moreover, the investigation indicated that males members' faculty have more experience than female members' faculty and females saw barriers to using information technology.

Elkaseh et al. (2015) carried out a study on four universities two of them are private and the others are public at Western Libya, this research aimed to examine the factors which impacted applying technology into higher education in Libya including social effects and perceived enjoyment. The participants in this study were 175 teachers and 291 students. Therefore, the findings in the study were that perceived enjoyment had a very important impact on using technology in education by teachers easily, hence, it had a significant influence on the perceived enjoyment of students to use the technology easily only, also, the study found that social influence had a direct impact on the perceived ease of students in using and perceived usefulness of technology, but there is no direct impact on easily using of technology by teachers and perceived utility of the technology.

In a more recent study, Hbaci (2018) conducted a survey on educators' competence in the usage of computer technology to integrating technologies in Libya. The main aim of this survey was evaluating the implementation of technology into higher education from the educators’ views at Benghazi University and Omer Al-Moktar

University in Eastern Libya. Furthermore, this research aimed to determine the competence of educators in using computer technology in four areas: basic computer operation, the use of application software, the use of the internet, and the use of peripheral technologies.

This research determined if a difference existed in levels of competency between educators who majored in technical areas and those who majored in nontechnical disciplines. The participants of the research were 161 Libyan lecturers. Moreover, the findings of the study showed most of Libyan educators who work at universities lacked computer-related skills also they had very limited experience with the use of Internet resources, additional software, and peripheral technologies associated with modern instructional practices. The participants of the study believed that it is extremely important for Libyan education to integrate the technology in higher education that will help reform the education, also the finding found the government must establish education infrastructure.

Chapter 3

METHODOLOGY

This segment of the thesis focused on the method of the research used while conduction this research and technique of sampling when collecting data. Furthermore, this chapter describes the participants, data collecting instrument, method of data analysis, and validity and reliability which used in analyzing the data.

3.1 Research Method

This study used quantitative and applied a survey method for gathering the data by questionnaire. Quantitative research has different definitions that have given by investigators. Cohen (1980) defined quantitative research as a social study that uses empirical data and methods. He also stated empirical data as describing what is the case in the real world instead of what the case to be ought (Cohen & Manion, 1980). Furthermore, Creswell (1994) defined quantitative research as gathering the numerical data to explain phenomena and analyze the data based on using mathematical methods (Creswell, 1994).

3.2 Technique of Sampling

This study faced some problems, the researcher attempted to reach all the lecturers who work in the Faculty of Education at Misurata University, but because of the bad state of the country at that time the university is closed and the studying stopped. However, the researcher decided to take a random sampling from each department, in this technique all the population had the same chance to be chosen. Hence, 103 lecturers were reached to participate and they agreed to be voluntary participants.

Furthermore, the lecturers were chosen in this study to be participants based on those who were available, and the researcher managed to reach them.

3.3 Participants

In this study, the target population of the study was the lecturers who work in 13 different departments of Education Faculty at Misurata University 2019/2020 Spring Semester. Additionally, in this study, the sample was chosen randomly from each department. Moreover, the size of the sample was 103 lecturers.

Table 1: Gender of Participants Distribution

Gender	Frequency	Percentages
Female	55	53.4%
Male	48	46.6%
Total	103	100%

As shown in Table 1, a total of 103 lecturers at the Education Faculty participated in this study. (48 lecturers) belonged to the male 46.6% and (55 lecturers) belonged to the female 53.4%, and one of the participants did not answer this question. Moreover, the lecturers were from different educational departments, ages, and levels of education.

Table 2: Academic Department of the Participants

Department	Frequency	Percentages
Physics	9	8.7%
Geography	6	5.8%
History	11	10.7%
Mathematics	6	5.8%
Psychology	9	8.7%
Islamic Studies	7	6.8%
Chemistry	9	8.7%
Special Education	7	6.8%
Arabic language	8	7.8%
English Language	10	9.7%
Class teacher	6	5.8%
IT	8	7.8%
Administration and Educational Planning	7	6.8%
Total	103	100%

Table 2 indicated the departments of participants. 8.7% (9 lecturers) were from physics department, 5.8% (6 lecturers) were from Geography department, 10.7% (11 lecturers) were from History department, 5.8% (6 lecturers) were from Mathematics department, 8.7 (9 lecturers) were from Psychology department, 6.8% (7 lecturers) were from Islamic Studies department, 8.7% (9 lecturers) were from Chemistry department, 6.8% (7 lecturers) were from Special Education department, 7.8% (8 lecturers) were from Arabic Language department, 9.7% (10 lecturers) were from English Language, 5.8% (6 lecturers) from class teacher, 7.8% (8 lecturers) from IT

department, and 6.8% (7 lecturers) from Administration and Educational Planning department.

Table 3: The Number of Teaching Years for Participants

Teaching Year	Frequency	Percentages
1- 10	72	69.9%
11 – 20	23	22.3%
21 – 30	5	4.9%
31+	3	2.9%
Total	103	100%

As shown in Table 3, the researcher has divided the lecturers into four groups according to teaching years. The first group was between 1 and 10 years, it included 72 lecturers which represented (69.9%) of the participants. The second was between 11 and 20 years, it included 23 lecturers and the percent was (22.3%). The third was between 21 and 30 years included 5 participants (4.9%). The last one was more than 30 years with 3 participants that forms (2.9%). Moreover, there was one participant did not give an answer to this question.

Table 4: The Education Level of Participants

Education Level	Frequency	Percentages
Masters	74	71.8%
PhD	29	28.2%
Total	103	100%

As indicated in Table 4 the majority of participants (74 lecturers) 71.8% have a Master's degree, and (29 lecturers) 28.2% their level are Doctorate. Moreover, there were two participants did not answer this question.

Table 5: Having a Computer in Classroom

Answer	Percentage
Yes	46.5%
No	53.5%
Total	100

As clarified in Table 5, 46.5% of participants have a computer in the classroom, while 53.5% of participants have no a computer in their classroom.

Table 6: Having a Computer Lab in the Participant's Department

Answer	Percentage
Yes	26.7%
No	73.3%
Total	100

Table 6 shows that 26.7% of the participants said yes, they have a computer lab in their educational department, while 73.3% said no, they did not have a computer lab in their department.

Table 7: Participants' Level of Computer Technology Skills

The Level	Frequency	Percentage
Beginner	10	9.7%
Intermediate	60	58.3%
Advanced	33	32.0%
Total	103	100%

As shown in the Table 7, the lecturers were asked about their level skill of computer technology. The level of 10 participants (9.7%) was Beginner, 60 participants (58.3%) have Intermediate level of computer technology, and the level of 33 participants (32.0%) was advanced.

Table 8: Participants' Training in Computer Technology

Computer Training	Frequency	Percentage
Pre-service	24	23.3%
In-service	9	8.7%
Pre-service & In-service	23	22.3%
None	47	45.6%
Total	103	100%

Table 8 illustrates where the participants get computer training. 23.3% of the participants obtained the training pre-service, 8.7% of participants obtained the training on computer in-service, and 22.3% of participants get the training pre-service and in-service, while 45.6% of them did not get any training on the computer.

Some of those who obtained computer training explained that they have taken the training by themselves were not from the university.

Table 9: Where the Participants Have Computer Technology

Item	Percentage
Home	37.3%
School	02%
Home & School	58.7%
Do not have it	02%
Total	100%

As it is seen in Table 9, 37.3% of participants have the computer device at home, only 2% of the participants have it at school, and 58.7% of participants have the computer at home and school while only 2% of participants answered this question do not have it at all.

Table 10: Where the Participants Use Computer Technology

Item	Percentage
Home	34.3%
School	0%
home & school	61.8%
do not use it	3.9%
Total	100%

As shown in Table 10, the participants answered about where they use the computer. The participants who use the computer at home were 34.3%, there was no one use

only the computer at school 0%, and 61.8% of the lecturers do use the computer at home and school whereas the participants who do not use the computer at all were 3.9% of the participants.

Table 11: Where the Participants Have Access to the Internet

Item	Percentage
Home	67.3%
School	01%
home & school	31.7%
do not use it	0%
Total	100%

Table 11 illustrated where the participants can access to the internet. The answers were as following:

67.3% of the participants can obtain and use the internet only at home, the participants who can access the internet at school were only 1%, and 31.7% of the participants can obtain and use the internet at home and school, whereas 0% of the participants who do not use the internet, that's mean all the participants can access to the internet.

3.4 Data Collection Procedure and Instrumentation

A quantitative design and survey method were applied to determine the lecturers' competency at faculty of education in Misurata University 2019-2020 Spring Semester.

The questionnaire obtained from a study conducted by Al-Alwani (2005) and it has been modified by Elshaikhi (2015). The questionnaire comprises three main parts.

The first part focuses on information of demographic. This part includes eleven questions of gender, the academic section, and so on.

The second part is about the evaluation of the level of integrating information technology. This part has two sections the first section is about information technology knowledge, which involves 13 items. Section two involves 11 statements that are about using information technology.

The third part has 4 sections about measuring the integration of information technology. The first section is the policy and support, this section has 9 items, the second section includes 11 statements that about infrastructure and resources while the third section involves 9 items about the faculty members' attitudes on integrating technology, and the preparation and development is the last section which contains 6 items.

3.5 Data Analysis Procedure

In this survey, the data collected were analyzed using descriptive analysis technique with using SPSS statistics 22.0 software, frequency, percentage, and one-way ANOVA.

3.6 Validity and Reliability

The questionnaire used in this study was adopted by the original researcher (Elshaikhi, 2015).

Elshaikhi(2015) calculated the value of Cronbach alpha from the study's findings to evaluate the reliability of the study instrument which were as 0.95, 0.84, 0.82,

0.74,0.88, and 0.87. For this study, the reliability (Cronbach's Alpha) is 0.912, which is more than the minimum requested (0.70) which is high enough.

Table 12: Reliability Statistics

Cronbach's Alpha	No. of Items
0,912	34

As can be seen in Table 12, the researcher has measured the Cronbach's Alpha of this study. Therefore, 34 items were measured in this analysis, and the result shows that it is 0.912, which proves that it is reliable.

Chapter 4

RESEARCH FINDINGS

In the research finding chapter, the findings are being presented that obtained from the analysis of the data. The below data show lecturers' level in the use of computer technology, and lecturers' attitudes and the university's' support toward integration of the computer in education.

4.1 The Competency Level of Lecturers in Using Computer Technologies

Table 13 shows the knowledge and the level of lecturers in using computer technology in the classrooms.

Table 13: Knowledge of Information Technology

Knowledge of Information Technology	No Experience	Very Little Experience	Some Experience	A lot of Experience	Mean	Standard Deviation
Computers in general	5.8	25.2	47.6	21.4	2.8	0.82
Word processing program (e.g., Microsoft Word)	4.9	21.4	38.8	35	3	0.87
Spreadsheets programs(e.g., Microsoft Excel)	17.5	28.2	36.9	17.5	2.5	0.97
Presentation programs (e.g., Power point)	7.8	30.1	31.1	31.1	2.8	0.95
Web searching (e.g. Google, Yahoo ,etc)	4.9	13.6	44.7	36.9	3.1	0.82

In Table 13 presents the evaluation of the participants about their own experience and knowledge in using a computer and some important programs. The first statement ‘computer in general’, 31% of lecturers have no or very little experience in using the computer, while 69% of lecturers have some of a lot of experience with. However, the majority of the participants have some or a lot of experience in using a computer in general with 69%.

26.3% of the participants have no or very little experience with ' Word processing program (e.g., Microsoft Word), and 73.8% have some or a lot of experience with it. Moreover, 45.7% of the participants have no or very little experience in using programs such as Microsoft Excel, while 54.4% have some or a lot of experience with it.

Regarding the presentation programs (e.g., PowerPoint), 37.9% of the participants have no or very little experience, and 62.2% have some or a lot of experience with. According to the last statement 'Web searching (e.g. Google, Yahoo, etc),' 18.5% of respondents have no or very little experience, while 81.6% have some or a lot of experience with Web searching.

Consequently, the majority of the participants were familiar with using the Microsoft Programs: Word, Excel, PowerPoint, with 73.8%, 54.4%, and 62.2% respectively. Web searching, on the other hand, was the highest among the other skills with 81.6%. In this section as seen, the lecturers have good experience and knowledge in the computer in general and in using basic application software.

And as illustrated above in Table 13, the mean calculated regarding items were: 2.8, 3, 2.77, 2.5, 2.8, and 3.1 consecutively.

Similar results found in Isleem (2003), who carried out research for defining the teachers' level in using computer technology to achieve educational goals in public schools in Ohio.

4.2 What the Lecturers Can Use to Integrate Computer Technology at Education Faculty

Regard to integrate technology in education, table 4.2 shows what the lecturers can use to integrate computer in their teaching.

Table 14: Using Information Technology to

Using Information Technology to	Never	Rarely	Sometimes	Often	Always	Mean	Standard Deviation
Create multimedia presentations for the classroom	18.4	28.2	21.4	21.4	10.7	2.7	1.27
Improve my instructional performance	6.8	17.5	31.1	32	12.6	3.2	1.1
Manage my courses(e.g. blackboard: post homework or other class requirements, grades, project information or suggestions)	13.6	20.4	34	24.3	7.8	2.9	1.1
Share my student work on the web	35.9	28.2	20.4	9.7	5.8	2.2	1.2
Communicate with students outside of classroom hours	22.3	23.3	37.9	7.8	8.7	2.5	1.17

This section in the part II of the questionnaire, there were five items related to my study. Regarding the statement one ‘Using Information Technology to create multimedia presentations for the classroom’ 46.6% of the lecturers never or rarely use it, while 42% stated sometimes or often use it, and 10.7% of the participants are always use it. In the second item ‘Using Information Technology to improve my instructional performance’ 24.3% of the answerers are never or rarely use it and 63.1% are sometimes or often use it while 12.6% always use this technology.

As it is shown in the third statement ‘Using Information Technology for managing my courses’ this statement is never or rarely used by 34%, sometimes and often used by 58.3% and always used by 7.8% of the participants.

However, in the next statement 'Using Information Technology for sharing the work of student on the web' the majority of participants 64.1% never or rarely use it, 30.1% sometimes or often use it and 5.8% always use it. When asked the lecturers about 'Using Information Technology to communicate with students outside of classroom hours' 45.6% of them never or rarely use for that, 45.7% sometimes or often use it and 8.7% always use it.

This part shows that the majority lecturers do not use the technology as an educational tool in their classrooms b, but some of them often use it to improve their performance in teaching. While the majority of the lecturers said that they never use computer technology to be in touch with the students or share their work in the Internet.

This finding similar with Campbell (2002) study, who found out that the teachers use computer technology but, they are taken difference choices in using the computer.

4.2.1 What Lecturers Can Use to Integrate Computer Technology at Education Faculty Based on Their Attitudes

Table 15: Attitudes of Faculty Members about Integrating Information Technology

Faculty Members Attitudes about Integrating Information Technology	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
I believe in the importance of using information technology in teaching	2.9	0	4.9	48.5	43.7	4.3	0.81
I am interested in implementing information technology to deliver courses	6.8	5.8	8.7	46.6	32	3.9	1.12
I consider using information technology in teaching saving time	0	3.9	4.9	53.4	37.9	4.2	0.72
Our department chair has positive attitudes towards integrating of information technology	5.8	5.8	35.9	42.7	9.7	3.4	0.95
I believe that using information technology will improve my teaching skills	1	2.9	4.9	51.5	39.8	4.2	0.76
I think it is easy for me to manage the classroom while applying information technology	0	4.9	4.9	57.3	33	4.1	0.73
I have time to develop the activities \ lessons that use information technology	2.9	8.7	9.7	61.2	17.5	3.8	0.92

Integrating information technology increases that social interaction between my students and me	1	6.8	9.7	44.7	37.9	4.1	0.91
I am willing to collaborate with specialists to integrating technology	6.8	4.9		59.2	29.1	4.1	0.73

In Table 15 the lecturers were asked to determine their attitudes about Integrating Information Technology in 9 different situations. In each statement, the lecturers stated they strongly disagreed, disagreed, neutral, agreed or strongly agreed with it. Only 2.9% said they disagree with the importance of using the technology in teaching while 4.9% was neutral, and the majority 92.2% said they agree with that. As shown in Table 15, in the second statement 12.6% disagreed on it, 8.7% were neutral, and 78.6% agreed on implementing information technology to deliver courses.

In addition, 3.9% disagreed on that using information technology in teaching can saving time and 4.9% were neutral while the majority of the participants 91.3% agreed.

In reference to the positive attitudes of the chair of the department chair towards integrating information technology, 11.6% disagreed on it whereas 35.9% were neutral and a huge population of the respondents 52.4% agreed on the statement.

3.9% of the participants disagreed on that the use of information technology will improve my teaching skills and 4.9% were neutral with it whereas the majority of lecturers 91.3% with that using technologies can improve the skills of teaching.

Regarding the next statement, 4.9% of participants disagreed with easily managing the classroom while applying information technology and the same percentage of 4.9%were neutral on it, moreover, 90.3% agreed and they had a high positive level about integrating technology in the classroom.

As can be seen in this statement, having time to develop the activities and lessons through using technology, 11.6% disagreed because of they do not have time to develop the activities by using technology, and 9.7% were neutral, while 78.8% had a positive attitude to develop the lessons by using technology.

Additionally, 7.8% disagreed that integrating technology can increasing social interaction between students and lecturers, and 9.7% were neutral while 82.6% agreed on it.

The last statement in table 15, the willing of the lecturers to collaborate with specialists to integrating technology, a small number 4.9% of the participants disagreed with this statement, and 6.8% had no view on this they were neutral otherwise, 88.3% agreed and they are ready to collaborate with specialists in integrating the technology.

The results of this table show that the majority of participants agreed on all the statement, moreover, the lecturers have a positive attitude toward using computer technology.

On the same, Eyadat (2006) have got the same finding in his study about the attitudes of teachers and students at Jordan University to use computer technology.

Finally, Eyadat (2006) found that the participants who used to use computers had positive attitudes toward utilization technology.

4.2.2 What Lecturers Can Use to Integrate Computer Technology at Education Faculty Based on University's Support

Table 16: Policy and Support

Policy and Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Our university has a good strategic plan for integration information technology	21.4	19.4	35	18.4	5.8	2.6	1.1
Our department chair is knowledgeable about the integration of information technology	10.7	8.7	45.6	29.1	5.8	3.1	1
Our department chair has positive attitudes towards application of information technology	11.7	18.4	27.2	35.9	6.8	3	1.13
There is enough technical support\ advice for information technology integration in our department	22.3	27.2	25.2	19.4	5.8	2.5	1.19

As can be seen in Table 16, policy and support item, there were 4 statements for respondents Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. The statements are to know the university's policy and support to integrate technology in educational plans. 40.8% of the lecturers reported being strongly agreed or agreed with having a good strategic plan to integrate information technology in the university, 35% of the participants were neutral, while 24.2% agreed or strongly agreed with the statement.

Regarding the second statement, 19.4% of the participants strongly disagreed or disagreed that that the chair of the department is knowledgeable about the integration of technology and 45.6% were neutral while 34.9% agreed or strongly agreed.

Regarding the next statement, 30.1% strongly disagreed or disagreed that the chair of the department is having a positive attitude to apply information technology, and 27.2 were neutral while the majority 42.7% agreed with.

When asked the participants if their department has enough technical support to integrate technology, the majority of the participants 49.5% strongly disagreed or disagreed, 25.2% were neutral, and the rest 25.2% strongly agreed or agree.

Table 17: Infrastructure and Resources

Infrastructures and Resources	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
There are enough computers and other computer peripherals at our university	25.2	27.2	22.3	23.3	1.9	2.4	1.16
The architecture of classrooms is suitable enough to use the information technology	24.3	28.2	21.4	21.4	4.9	2.5	1.21
There is appropriate number of students in classrooms to use information technology	14.6	21.4	23.3	40.8	0	2.9	1.09
There is internet service in our department	33	29.1	15.5	15.5	6.8	2.3	1.27
Students do have an opportunity to access the Internet during the school day	21.4	20.4	27.2	27.2	3.9	2.7	1.19
Students do have	2.9	3.9	30.1	50.5	12.6	3.6	0.85

adequate access to information technology outside of the university							
Internet connection is far enough for use while teaching	32	36.9	13.6	17.5	0	2.1	1.06

Regarding Infrastructure and Resources Table 17, 52.4% strongly disagreed or disagreed with there are enough computers at the university and there were 22.3% said neutral while 25.2% agreed or strongly agreed on it.

There was strongly disagreed or disagreed by 52.5% that the classrooms are suitable enough to use the information technology, it was neutral by 21.4% and strongly agreed or agreed on by 26.3%.

Moreover, 36% of the participants strongly disagreed or disagreed that the number of students in the classrooms is appropriate to use technology and 23.3% were neutral while the majority 40.8% agreed on it. 22.3% of participants stated and agreed that there is internet service in the department was strongly disagreed or disagreed by 62.1% and was neutral by 15.5%.

According to having an opportunity for students to access the Internet when they are in the school day, the majority of lecturers 41.8% disagreed with it and only 27.2% were neutral while the rest 31.1% agreed with it.

In the statement, when the lecturers were asked if the students have a chance to access technology outside of the university showed 6.8% of the lecturers disagreed on it and 30.1% were neutral, nonetheless, 63.1% agreed with the statement.

Regarding the last statement in Table 17, if the Internet is fast enough to use it in teaching, 68.9% of the lecturers disagreed on it while 13.6 were neutral, moreover, only 17.5% agreed on it.

Table 18: Preparation and Development

Preparation and Development	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
The information technology training opportunities are available in our university	24.3	36.9	23.3	15.5	0	2.3	1
There is a pre-service training about the information technology skills	26.2	31.1	25.2	14.6	2.9	2.3	1.11
There is an in-service training about the information technology skills	20.4	32	29.1	16.5	1.9	2.4	1.05
I have enough time to learn skills of how to integrating technology	12.6	1.9	9.7	67	8.7	3.5	1.1

In Table 18 the participants had to answer the statements about preparation and development.

In the first statement, if the opportunities training in information technology are available in the university, 61.2% disagreed with the statement, while 23.3% were neutral and 15.5% agreed with.

For the second statement, 57.3% disagreed with getting the training of pre-service about using the technology skills and 25.2% were neutral, however, 17.5% agreed with having pre-service training about the skills of information technology.

Most of the participants 52.4% disagreed whit gain in-service training on the technologies skills, and 29.1% did not know the exact answer, they were neutral, whereas 18.4% said they have in-service training on the skills of information technologies.

Furthermore, in the last part in table 18, 14.5% stated that they have no time to learn the skills of technology and 9.7% were neutral in this statement while the majority of the lecturers 75.7% stated that they have enough time for learning how they can integrate technology.

4.3 The Different Skill Level of Libyan Lecturers across the two Competency areas of Using Application Software and Using the Internet

ANOVA Test was administered to answer this research question regarding the different skill levels of the lecturers across the two competency areas of using application software and using the internet.

Table 19: The Different Skills Level of Lecturers in Using Application Software

Dependent Variable	(I) What is your level of technology skills?	(J) What is your level of technology skills?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Computers in general	Beginner	Intermediate	-,97268*	,22083	,000	-1,5214	-,4239
		Advanced	-1,87879*	,23257	,000	-2,4567	-1,3009
	Intermediate	Beginner	,97268*	,22083	,000	,4239	1,5214
		Advanced	-,90611*	,13364	,000	-1,2382	-,5740
	Advanced	Beginner	1,87879*	,23257	,000	1,3009	2,4567
		Intermediate	,90611*	,13364	,000	,5740	1,2382
Word processing program (e.g., Microsoft Word)	Beginner	Intermediate	-,91439*	,23698	,001	-1,5032	-,3255
		Advanced	-1,89899*	,24957	,000	-2,5191	-1,2788
	Intermediate	Beginner	,91439*	,23698	,001	,3255	1,5032
		Advanced	-,98460*	,14341	,000	-1,3410	-,6282
	Advanced	Beginner	1,89899*	,24957	,000	1,2788	2,5191
		Intermediate	,98460*	,14341	,000	,6282	1,3410
Spreadsheets programs(e.g., Microsoft Excel)	Beginner	Intermediate	-,80146*	,27056	,015	-1,4738	-,1291
		Advanced	-1,94949*	,28494	,000	-2,6575	-1,2415
	Intermediate	Beginner	,80146*	,27056	,015	,1291	1,4738
		Advanced	-1,14804*	,16374	,000	-1,5549	-,7412
	Advanced	Beginner	1,94949*	,28494	,000	1,2415	2,6575
		Intermediate	1,14804*	,16374	,000	,7412	1,5549
Presentation programs (e.g., Power point)	Beginner	Intermediate	-,82878*	,27657	,014	-1,5160	-,1415
		Advanced	-1,82828*	,29127	,000	-2,5520	-1,1045
	Intermediate	Beginner	,82878*	,27657	,014	,1415	1,5160
		Advanced	-,99950*	,16737	,000	-1,4154	-,5836
	Advanced	Beginner	1,82828*	,29127	,000	1,1045	2,5520
		Intermediate	,99950*	,16737	,000	,5836	1,4154
Web searching (e.g. Google, Yahoo ,etc)	Beginner	Intermediate	-,85610*	,24576	,003	-1,4668	-,2454
		Advanced	-1,61616*	,25882	,000	-2,2593	-,9730
	Intermediate	Beginner	,85610*	,24576	,003	,2454	1,4668
		Advanced	-,76006*	,14873	,000	-1,1296	-,3905
	Advanced	Beginner	1,61616*	,25882	,000	,9730	2,2593
		Intermediate	,76006*	,14873	,000	,3905	1,1296

In table 19, there is a significant difference (significance) of the answers based on the lecturers' level of technology in using application software in the teaching process.

According to the first statement in table 19, ‘computer in general’, the results show there is a significant difference between two different groups of people. The skills of the advanced participants were different from the intermediate and beginners, where Sig. is 0.00 (less than 0.05).

Regarding the second statement, word processing program (e.g., Microsoft Word), it shows there is a significant difference in using word processing programs between the participants. Furthermore, the skills of the lecturers who have an advanced level of using technology whit Sig is 0.000 were deferent from those who have beginner or intermediate skill.

The results of the participants’ skill in using Spreadsheets programs (e.g., Microsoft Excel) are also different, it means the lecturers who have beginners level of using technology chose’ no or very little experience' in using Spreadsheets programs (e.g., Microsoft Excel) while the lecturers who have advanced level chose’ some or a lot of experience’ where Sig is 0.000.

In the last two statements, the table 19 shows there is a significant difference between the participants level of technology (beginner, intermediate, advanced) in Presentation programs (e.g., Power point), and Web searching (e.g. Google, Yahoo, etc) this means there is a difference in the answers of each group regarding the level of technology, the lecturers who have beginner level answered 'no or a little experience'. On the other hand, the lecturers who have advanced level answered 'some or a lot of experience', where Sig is 0,000.

Table 20: The Lecturers' Access to the Computer and the Internet

Dependent Variable	(I) What is your level of technology skills?	(J) What is your level of technology skills?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Do you have a computer in your class?	Beginner	Intermediate	,26958	,17870	,325	-,1745	,7136
		Advanced	,29293	,18819	,302	-,1747	,7606
	Intermediate	Beginner	-,26958	,17870	,325	-,7136	,1745
		Advanced	,02335	,10814	,977	-,2454	,2921
	Advanced	Beginner	-,29293	,18819	,302	-,7606	,1747
		Intermediate	-,02335	,10814	,977	-,2921	,2454
Where do you have a computer?	Beginner	Intermediate	,18579	,35323	,871	-,6919	1,0635
		Advanced	-,12121	,37199	,948	-1,0456	,8031
	Intermediate	Beginner	-,18579	,35323	,871	-1,0635	,6919
		Advanced	-,30700	,21376	,360	-,8382	,2242
	Advanced	Beginner	,12121	,37199	,948	-,8031	1,0456
		Intermediate	,30700	,21376	,360	-,2242	,8382
Where do you usually use the computer?	Beginner	Intermediate	-,31148	,35911	,687	-1,2038	,5809
		Advanced	-,57576	,37819	,318	-1,5155	,3640
	Intermediate	Beginner	,31148	,35911	,687	-,5809	1,2038
		Advanced	-,26428	,21732	,480	-,8043	,2757
	Advanced	Beginner	,57576	,37819	,318	-,3640	1,5155
		Intermediate	,26428	,21732	,480	-,2757	,8043
Where do you usually have access to the internet?	Beginner	Intermediate	-,17851	,35064	,879	-1,0498	,6928
		Advanced	-,49495	,36928	,411	-1,4126	,4227
	Intermediate	Beginner	,17851	,35064	,879	-,6928	1,0498
		Advanced	-,31644	,21220	,333	-,8437	,2108
	Advanced	Beginner	,49495	,36928	,411	-,4227	1,4126
		Intermediate	,31644	,21220	,333	-,2108	,8437

In table 20, as it can seen there is no significant difference (significance) between the groups as all the 'sig.' is more than, 05.

Table 21: The Different Skills Level of Lecturers in Using the Internet

Dependent Variable	(I) What is your level of technology skills?	(J) What is your level of technology skills?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Create multimedia presentations for the classroom	Beginner	Intermediate	-,85792	,40931	,117	-1,8750	,1592
		Advanced	-1,87879*	,43106	,000	-2,9499	-,8077
	Intermediate	Beginner	,85792	,40931	,117	-,1592	1,8750
		Advanced	-1,02086*	,24770	,000	-1,6364	-,4054
	Advanced	Beginner	1,87879*	,43106	,000	,8077	2,9499
		Intermediate	1,02086*	,24770	,000	,4054	1,6364
Improve my instructional performance	Beginner	Intermediate	-,90893*	,36419	,049	-1,8139	-,0040
		Advanced	-1,56566*	,38354	,000	-2,5187	-,6126
	Intermediate	Beginner	,90893*	,36419	,049	,0040	1,8139
		Advanced	-,65673*	,22040	,014	-1,2044	-,1091
	Advanced	Beginner	1,56566*	,38354	,000	,6126	2,5187
		Intermediate	,65673*	,22040	,014	,1091	1,2044
Manage my courses(grades, project information or suggestions	Beginner	Intermediate	-,99271*	,37209	,032	-1,9173	-,0681
		Advanced	-1,73737*	,39186	,000	-2,7111	-,7637
	Intermediate	Beginner	,99271*	,37209	,032	,0681	1,9173
		Advanced	-,74466*	,22518	,006	-1,3042	-,1851
	Advanced	Beginner	1,73737*	,39186	,000	,7637	2,7111
		Intermediate	,74466*	,22518	,006	,1851	1,3042
Share my student work on the web	Beginner	Intermediate	-,87614	,40703	,104	-1,8876	,1353
		Advanced	-1,47475*	,42866	,004	-2,5399	-,4096
	Intermediate	Beginner	,87614	,40703	,104	-,1353	1,8876
		Advanced	-,59861	,24632	,057	-1,2107	,0135
	Advanced	Beginner	1,47475*	,42866	,004	,4096	2,5399
		Intermediate	,59861	,24632	,057	-,0135	1,2107
Communicate with students outside of classroom hours.	Beginner	Intermediate	-,60291	,41159	,346	-1,6257	,4198
		Advanced	-1,02020	,43346	,067	-2,0973	,0569
	Intermediate	Beginner	,60291	,41159	,346	-,4198	1,6257
		Advanced	-,41729	,24908	,251	-1,0362	,2016
	Advanced	Beginner	1,02020	,43346	,067	-,0569	2,0973
		Intermediate	,41729	,24908	,251	-,2016	1,0362

The last table shows some significance regarding the use of technology (create multimedia, improve my instructional performance, etc.) based on the level of technology for every group (beginner, intermediate, advanced).

The ANOVA statistics show that there is a significant difference between the beginners and advanced lecturers when asked about ‘create multimedia presentations for the classroom’. This means that there is a big difference in the answers of beginner teachers and advanced ones. This is expected to mean that those beginner teachers chose ‘never or rarely’ when they answered this question “Create multimedia presentations for the classroom’ while the advanced teachers chose ‘often or always’.

According to the results of the second statement in table 21, using technology to improve my instructional performance, it shows there is a significant difference between the participants’ answers based on the technology levels, the lecturers who used to use technology to improve their instructional performance those in the advanced level and they chose ‘often or always’. However, the other lecturers chose ' 'beginner or intermediate' about improve their instructional performance where Sig is less than 0.05.

Regarding ‘managing the courses (e.g. blackboard: post homework or other class requirements, grades, project information or suggestions). And share my student work on the web’ statements in table 21, there is a difference in the answers between two groups of participants of technology level, as it shows Sig is less than 0.05.

As it can be seen in the results, there is some difference between the levels of lecturers when asked about ‘Communicate with students outside of classroom hours’ statement, it means the people who answered ‘always or often’ are advanced lecturers, while the beginners or intermediate lecturers said ‘never or rarely’.

Saying there is significance, it means that different groups have different answers.

Thus, the classification of these groups (the level of the computer) significantly affects on using technology in the classroom.

Chapter 5

CONCLUSION

The research was conducted to define the Libyan lecturers' level of using computer technology and the attitudes of lecturers toward integrating technology in education. The quantitative research method was applied. Moreover, the questionnaire was used as a research instrument for data collection. Participants were 103 Libyan lecturers who work at Misurata University in the fall semester 2019-2020, there were 48 males and 55 were females who voluntarily participants in this study. Moreover, lecturers have different academic levels (master and Ph.D.). Moreover, all the data were analyzed by using descriptive analysis, Frequency (f), Percentage, and ANOVA test, for analyzing the gathered data.

This study discovered that the lecturers at Misurata University have different levels of computer technology use, however, the majority of the lecturers have some or a lot of experience with using the computer technology and they are familiar with using some application software like Microsoft word, Excel, PowerPoint programs, while the others have no or little experience in using the computer in general.

Moreover, it can be concluded that computer technology plays a significant role in the learning and teaching process for most lecturers in this research. Yet, around half of the lecturers never or rarely use computer technology to communicate with students outside of the classroom or share their work on the web.

Regarding the attitudes of lecturers about integrating computer technology at the university, the study found out most of the lecturers have positive attitudes toward using the computer in their teaching and believe that technology can improve their educational skills. Additionally, the lecturers feel the importance of using technology in teaching and they are willing to collaborate to integrate it.

In regard to the support from the university about the use of computer technology, the results demonstrate that some lecturers agreed on there is awareness from the university to integrate technology while the others disagreed or were neutral about it. Furthermore, the research found that there are not enough computers in the university also the internet service is not available in the college for lecturers and students. It can be said the lecturers can access the Internet outside the faculty or if they have their own Internet inside.

Likewise, some lecturers reported that they took training about computer skills which was not from the university, the lecturers took the training by themselves, however, most of the lecturers stated that they have time to improve themselves and learn how to integrate the technology.

In regard to the results in the last question, 'The different skill level of Libyan lecturers across the two competency areas of using application software and using the internet' the results show that there was a significant difference between the answers of the lecturers. Further, the level of the lecturers was different from 'the beginner, intermediate, and advanced' regarding using the computer and basic software. Some lecturers who have an advanced level of technology they answered

'some or a lot of experience' with that, while the others have a beginner or intermediate level it meant they answered 'no or very little experience'.

Moreover, there is no significant difference between the lecturers' answers about having or access the computer and the internet. Additionally, in the last part of the last question, the results show some significance in using the Internet to be in touch with students and to use the computer to manage the courses or to improve the lecturers' performance. However, the lecturers have different answers to the questions. the people who chose 'often or always' are in the advanced level of using technology, and the participants who chose 'never or rarely' those are in beginner or intermediate level of using technology.

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APPENDICES

Appendix A: Questionnaire English Version

Integration Information Technology Survey

Part I: Demographic Information

Please choose one option to answer the following questions and do not forget to write your answer for questions 2,3and 4.

Question	Answer		
1. Identify your gender	Male	Female	
2. In which academic department do you work?			
3. How many years have you been teaching?			
4. I obtained my highest academic degree from:			
5. What is your level of education?	Master's degree	Doctorate	
6. Do you have computer in your classroom?	Yes	No	
7. Is there computer lab in your department for the student?	Yes	No	
8. What is your level of technology skills?	Beginner	intermediate	Advanced
9. When do you obtain the technology-training program?	Pre-service	In-service	
	Pre-service & In-service	None	
10. Where do you have a computer?	School	Home	
	Home &School	I do not have	
11. Where do you usually use a computer?	School	Home	
	Home &School	I do not have	
12. Where you have access to the Internet?	School	Home	
	Home &School	I do not have	

Part II: Current Level of Integrating Information

1: Knowledge of Information Technology

For each statement, please circle the appropriate number that best describes your current level of experience with technologies by using this scale:

1= No Experience. 2=Very Little Experience. 3=Some Experience. 4=A lot of Experience

Knowledge of Information Technology	No Experience	Very Little Experience	Some Experience	A lot of Experience
1. Computers in general	1	2	3	4
2.Word processing program (e.g., Microsoft Word)	1	2	3	4
3.Spreadsheets programs(e.g., Microsoft Excel)	1	2	3	4
4. Presentation programs (Microsoft)	1	2	3	4
5. Image & Drawing editing applications (e.g. movie)	1	2	3	4
6. Multimedia programs (e.g., Flash)	1	2	3	4
7. Online course support (e.g. Course web pages, Blackboard, etc.)	1	2	3	4
8. E-mail programs (e.g., Outlook Express, Yahoo, Hotmail....etc)	1	2	3	4
9. Web page creation programs (e.g., Front Page, Dream weaver)	1	2	3	4
10.Web searching (e.g. Google, Yahoo ,etc)	1	2	3	4
11. Specific learning programs (e.g., lab simulation)	1	2	3	4
12. Online social networking service (e.g., using scanner, digital or video camera, etc).	1	2	3	4
13. Imaging device (e.g. using scanner, digital or video camera, etc)	1	2	3	4
Other, please specify:	1	2	3	4

2: Usage of information Technology

For each objective listed below, please indicate how often you use information technology in your teaching by using this scale:

1= Never. 2= Rarely. 3=Sometimes. 4=Often, 5= Always

Using Information Technology to	Never	Rarely	Sometimes	Often	Always
1. Access information and research on best practices for teaching.	1	2	3	4	5
2. Create multimedia presentations for the classroom.	1	2	3	4	5
3. Improve my instructional performance.	1	2	3	4	5
4. Manage my courses (e.g. blackboard: post homework or other class requirements, grades, project information or suggestions.)	1	2	3	4	5
5. Facilitate complex thinking skills.	1		3	4	5
6. Product creative work.	1	2	3	4	5
7. Share my student work on the web.	1	2	3	4	5
8. Support learning and research (e.g., use content-specific tools).	1	2	3	4	5
9. Collaborate with colleagues and experts\ or other professionals.	1	2	3	4	5
10. Communicate with students outside of classroom hours.	1	2	3	4	5
11. Process data and report results.	1	2	3	4	5
Other , please specify					

Part III: The Integration of information technology

For each statement, please indicate to what extent you agree or disagree with each of the following statement by circling the appropriate number.

1= strongly disagree; 2= Disagree; 3=Undecided; 4= Agree; 5=Strongly Agree

Policy and support	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1. Our university has good strategic plan for integration information technology	1	2	3	4	5
2. There is a specific budget for information in our university.	1	2	3	4	5
3. There is obligation from the ministry to let me use information technology.	1	2	3	4	5
4. Specialists follow the integration of technology that I use in my teaching.	1	2	3	4	5
5. There is a tangible motivation form education community to use information technology.	1	2	3	4	5
6. Our department chair is knowledgeable about the integration of information technology.	1	2	3	4	5
7. Our department chair has positive attitudes towards application of information technology	1	2	3	4	5
8. There is enough technical support\ advice for information technology integration in our department.	1	2	3	4	5
9. The ministry of education does require me to use technology in my teaching.	1	2	3	4	5

Infrastructure and Resources	Strongly Disagree	Disagree	undecided	Agree	Strongly Agree
1. There are enough computers and other computer peripherals at our university.	1	2	3	4	5
2. The architecture of classrooms is suitable enough to use the information technology.	1	2	3	4	5
3. There is appropriate number of students in classrooms to use information technology.	1	2	3	4	5
4. There is internet service in our department.	1	2	3	4	5
5. Students do have an opportunity to access the Internet during the school day.	1	2	3	4	5
6. Students do have adequate access to information technology outside of the university.	1	2	3	4	5
7. Internet connection is far enough for use while teaching.	1	2	3	4	5
8. There are computerized textbooks for most of our curricula.	1	2	3	4	5
9. There are specialized Arabian websites on the Internet.	1	2	3	4	5
10. There are specialized Arabian software programs.	1	2	3	4	5
11. I can access to technical support in using information technology in my teaching.	1	2	3	4	5

Preparation and Development	Strongly Disagree	Disagree	undecided	Agree	Strongly Agree
1. The information technology training opportunities are available in our university.	1	2	3	4	5
2. There is a pre-service training about the information technology skills.	1	2	3	4	5
3. There is an in-service training about the information technology skills.	1	2	3	4	5
4. My pre-service training to use information technology was good.	1	2	3	4	5
5. My in-service training to use information technology was good.	1	2	3	4	5
6. I have enough time to learn skills of how to integrating technology.	1	2	3	4	5

If you have any other barriers that are not mentioned above, please specify them:

_____

_____

_____

_____

_____

_____

Thank you so much --

Appendix B: English Consent Form for Lecturers Questionnaire

Dear Lecturers,

I am an Information and Communication Technology master's student in Computer Education and Instructional Technology Department. I am currently working on my thesis "The Level of lecturers' Competence in the Using of Computer Technology in Libya. The aim of this thesis survey is to identify the level of lecturer's competency in using computer technology in teaching. Therefore, the aim of my thesis is to answer the following questions:

1- What is the competency level of the lecturer in using computer technologies?

2- What are the lecturers' attitudes about integrating computer technology at education faculty?

3- Is there support from the university about using computer technology?

4- Does the skill level of Libyan lecturers differ across the two competency areas of using application software, using the internet?

The questionnaire consists of 3 parts. To answer them, it will take less than 15 minutes of your time. Please read the questions carefully and tick the most appropriate answer. Participation in this survey is voluntary. Therefore, you are free to withdraw at any time. All data provided by you will be kept confidentially and will only be used for this research. For further information or complaint, you can contact me without any hesitation.

Therefore, if you agree to participate in this study, please fill and sign the appropriate fields below.

- The data which will be gathered through this questionnaire will be used only in determining your level and competency of using computer technology on teaching.
- Kindly, sincere answers are required. Additionally, it is very important for the researcher and thesis to fill all blank spaces and questions.

Thank you for your time and participation.

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- I have read and understood this form. I have asked my questions and received their answers. Therefore, I voluntarily accept to participate in this survey.

Participant's Name-Surname:

Date:

Signature:

Appendix C: Questionnaire Arabic Version

أولا : المعلومات الديموغراقية

من فضلك, اختر الإجابات المناسبة للإجابة علي الأسئلة التالية , مع الإجابات بالنسبة للأسئلة 2,3 و 4.

السؤال	الإجابة		
1- حدد جنسك	ذكر ○		أنثى○
2- في أي قسم أكاديمي تعمل؟			
3- كم عدد السنوات التي قضيتها في التدريس؟			
4- من أين حصلت علي اعلي درجه علمية لديك؟			
5- ما هي اعلي درجة علمية لديك؟	ماجستير ○		دكتوراه ○
6- هل لديك جهاز حاسب آلي "Computer" في قاعة التدريس ؟	نعم ○		لا ○
7- هل يوجد معمل حاسب آلي في قسمك العلمي للطلبة ؟	نعم ○		لا ○
8- حدد مستوي مهاراتك في استخدام الحاسب الآلي.	مبتدي ○	متوسط ○	متقدم ○
9- متى حصلت علي دورات في تقنية المعلومات؟	قبل الخدمة ○		اثناء الخدمة ○
10- أين يوجد لديك جهاز حاسب آلي ؟	في المنزل ○		في الكلية ○
	في المنزل والكلية ○		لا يوجد ○
11- أين تستخدم عادة الحاسب الآلي ؟	في المنزل ○		في الكلية ○
	في المنزل والكلية ○		لا استخدمه ○
12- أين يمكنك الحصول علي الانترنت"Internet".	في المنزل ○		في الكلية ○
	في المنزل والكلية ○		لا احصل عليه ○

ثانيا : المستوي الحالي في دمج تقنية المعلومات

أ. الخبرات في مجال تقنية المعلومات

لكل فقرة أرجو اختيار الرقم المناسب الذي يصف مستوي خبرتك في تقية المعلومات معتمدا علي التدرج الآتي :

1= لا توجد خبرة 2= القليل من الخبرة 3= بعض الخبرة 4= الكثير من الخبرة

الفقرة	لا توجد خبرة	القليل من الخبرة	بعض من الخبرة	الكثير من الخبرة
1- أجهزة الحاسب الآلي بصفة عامة.	1	2	3	4
2- برامج معالجة الكلمات |(Microsoft Word).	1	2	3	4
3- برامج الجداول الالكترونية مثل (Microsoft Excel).	1	2	3	4
4- برامج العروض التقدمية (Microsoft Power Point)	1	2	3	4
5- برامج تعديل الصورة والرسومات (Adobe Photoshop)	1	2	3	4
6- برامج الوسائط المتعددة مثل (Flash).	1	2	3	4
7- الدعم المباشر للمقررات الدراسية بواسطة الانترنت مثل (Blackboard, Course web pages).	1	2	3	4
8- برامج البريد الالكتروني مثل (Hotmail, Yahoo).	1	2	3	4
9- برامج تصميم الصفحات علي الانترنت مثل (Front page, Dreamweaver).	1	2	3	4
10- البحث والتصفح مثل (Yahoo, Google).	1	2	3	4
11- برامج تعليمية خاصة مثل (Lab simulation).	1	2	3	4
12- برامج التواصل الاجتماعي (Face book, Twitter).	1	2	3	4
13- أجهزة التصوير مثل (Scanner, Digital or Video camera)	1	2	3	4
برامج أخري (حددها من فضلك).				

ب. استخدام تقنية المعلومات

حدد من فضلك مدي استخدامك لتقنية المعلومات في تدريسك لانجاز المهام المدرجة أدناه,معتمدا علي التدرج الأتي:

1= أبدا 2= نادرا 3= أحيانا 4= غالبا 5= دائما

استخدام تقنية المعلومات	أبدا	نادرا	أحيانا	غالبا	دائما
1- للعثور علي معلومات و أبحاث عن أفضل طرائق التدريس	1	2	3	4	5
2- لإعداد عروض تقديمه لاستخدامها أثناء التدريس.	1	2	3	4	5
3- لتحسين أدائي التعليمي.	1	2	3	4	5
4- لإدارة المقرر الدراسي مثل(التعليمات, الواجبات , الدرجات و المقترحات .الخ).	1	2	3	4	5
5- لتسهيل مهارات التفكير المعقدة.	1	2	3	4	5
6- لإنتاج الإعمال الإبداعية.	1	2	3	4	5
7- لمشاركة أعمال طلابي علي الانترنت.	1	2	3	4	5
8- لدعم البحث و التعلم: استخدام برامج تدعم محتوي معين مثل (Google Earth)	1	2	3	4	5
9- للتعاون مع الزملاء و الخبراء والمحترفين في مجال التخصص.	1	2	3	4	5
10- للتواصل مع الطلاب في غير ساعات الدراسة.	1	2	3	4	5
11- لتحليل البيانات و استخلاص النتائج.	1	2	3	4	5
استخدامات أخري, اذكرها من فضلك.					

ثالثا: دمج تقنية المعلومات

من فضلك, حدد مدي اتفاقك أو عدم اتفاقك مع الفقرات التالية, و دلك باختيار الرقم المناسب وفق التدريج الأتي :

1= غير موافق بشدة 2= غير موافق 3= لا ادري 4= موافق 5= موافق بشدة

مجال السياسات والدعم	غير موافق بشدة	غير موافق	لا ادري	موافق	موافق بشدة
1- لدي جامعتنا خطة إستراتيجية جيدة لدمج تقنية المعلومات.	1	2	3	4	5
2- هناك ميزانية مخصصة لدعم تقنية المعلومات في جامعتنا.	1	2	3	4	5
3- يوجد إلزام من وزارة التعليم العالي بضرورة استخدام تقنية المعلومات في تدريسنا.	1	2	3	4	5
4- المتخصصون يتابعون دمج تقنية المعلومات في تدريسي.	1	2	3	4	5
5- توجد حوافز مادية للتشجيع علي استخدام تقنية المعلومات.	1	2	3	4	5
6- رئيس قسمنا لدية معرفة كافية بتقنية المعلومات.	1	2	3	4	5
7- رئيس قسمنا يشجع علي تطبيق تقنية المعلومات.	1	2	3	4	5
8- يوجد دعم فني لدمج تقنية المعلومات في قسمنا.	1	2	3	4	5

مجال اتجاهات أعضاء هيأة التدريس نحو دمج تقنية المعلومات	غير موافق بشدة	غير موافق	لا ادري	موافق	موافق بشدة
1- أنا أؤمن بأهمية دمج تقنية المعلومات في التدريس.	1	2	3	4	5
2- أنا مهتم بتنفيذ تقنية المعلومات وتقديم دورات.	1	2	3	4	5
3- اعتقد أن استخدام تفنيه المعلومات في التدريس يحافظ علي الوقت.	1	2	3	4	5
4- أعضاء هيأة التدريس في قسمنا لديهم اتجاهات ايجابية نحو دمج تقنية المعلومات.	1	2	3	4	5
5- اعتقد أن استخدام تقنية المعلومات يحسن مهارات التدريس لدي.	1	2	3	4	5

6- اعتقد انه من السهل علي أدارة محاضرتي أثناء تطبيق تقنية المعلومات.	1	2	3	4	5

7- لدي الوقت لتطوير الدروس والأنشطة التي تطبيق باستخدام تقنية المعلومات.	1	2	3	4	5
8- دمج تقنية المعلومات يزيد من التفاعل الاجتماعي بيني وبين طلابي.	1	2	3	4	5
9- أنا مستعد للتعاون مع المتخصصين لدمج تقنية المعلومات في تدريسي .	1	2	3	4	5

مجال البنية التحتية والمصادر	**غير موافق بشدة**	**غير موافق**	**لا أداري**	**موافق**	**موافق بشدة**
1- توجد معدات وأجهزة حاسب آلي ومعامل كافية في جامعتنا.	1	2	3	4	5
2- التصميم الهندسي للحجرات الدراسية مناسب لاستخدام تقنية المعلومات.	1	2	3	4	5
3- عدد الطلاب مناسب لاستخدام تقنية المعلومات.	1	2	3	4	5
4- توجد خدمات "الانترنت" في قسمنا.	1	2	3	4	5
5- لدي الطلاب فرصة للحصول علي انترنت أثناء تواجدهم في الجامعة.	1	2	3	4	5
6- يتوفر للطلاب استخدام الانترنت خارج الجامعة.	1	2	3	4	5
7- خدمات الانترنت سريعة بشكل يسهل معه استخدامها أثناء التدريس.	1	2	3	4	5
8- توجد كتب مبرمجة لمعظم مناهجنا.	1	2	3	4	5
9- توجد مواقع عربية متخصصة علي الانترنت.	1	2	3	4	5
10- توجد برمجيات باللغة العربية.	1	2	3	4	5

مجال الإعداد والتطوير	غير موافق بشدة	غير موافق	لا ادري	موافق	موافق بشدة
1- فرص التدريب علي تقنية المعلومات متوفرة في جامعتنا.	1	2	3	4	5
2- يوجد تدريب "قبل الخدمة" يخص مهارات تقنية المعلومات.	1	2	3	4	5
3- يوجد تدريب" أثناء الخدمة" يخص مهارات تقنية المعلومات.	1	2	3	4	5
4- التدريب قبل الخدمة علي استخدام تقنية المعلومات كان جيدا.	1	2	3	4	5
5- التدريب أثناء الخدمة علي تقنية المعلومات كان جيدا.	1	2	3	4	5
6- لدي وقت كافي لتعليم مهارات دمج تقنية المعلومات.	1	2	3	4	5

إذا كان هناك أي معوقات أخري لم تذكر أعلاه, اذكرها من فضلك.

Appendix D: Arabic Consent Form for Lecturers Questionnaire

استبيان حول استخدام تقنية الكمبيوتر في التدريس

أعزائي المحاضرين في كلية التربية بجامعة مصراته

أنا طالبة ماجستير تكنولوجيا المعلومات والاتصالات في قسم تعليم الكمبيوتر وتكنولوجيا التعليم "Eastern Mediterranean University " في جامعة شرق البحر المتوسط .

أنا أعمل حاليًا على أطروحتي "مستوى كفاءة المحاضرين في استخدام تكنولوجيا الكمبيوتر في ليبيا(جامعة مصراته- كلية التربية). عليه ارجو منكم المشاركة في هذه الدراسه.

الهدف من هذا البحث هو تحديد مستوى كفاءة المحاضر في استخدام تكنولوجيا الكمبيوتر في عملية التعليم والتعلم, كما تهدف لزياة وعي المحاضرين بدمج التقنيات التعليميه في العملية التعليمية .

يتكون الاستبيان من 3 أجزاء. للاجابة عليها ستأخد من وقتك أقل من 15 دقيقة . يرجى قراءة الأسئلة بعناية وتحديد الإجابة الأنسب. المشاركة في هذا الاستطلاع طوعية و سيتم الاحتفاظ بسرية جميع البيانات التي قدمتها وسيتم استخدامها فقط لهذا البحث, بحيث لا يمكن التعرف على اى شخصيه من المشاركين فيها . لمزيد من المعلومات او الاستفسار، يمكنك الاتصال بي دون أي تردد .

لذلك ، إذا وافقت على المشاركة في هذه الدراسة:

- يرجى التفضل بإجابات صادقة. بالإضافة إلى ذلك ، من المهم للغاية للباحث والأطروحة ملء جميع المساحات الفارغة والأسئلة.

اشكرك على وقتك ومشاركتك.

الباحثه

إيمان أحمد عبدالسلام

aymanahmed151990@gmail.com

Appendix E: Permission Letter to Conduct Research

To: The Head of Computer Education and Instructional Technologies Department

Assoc. Prof. Dr. Ersun Iscioglu

From: Ayman Ahmed Abdulsalam

MSc Student

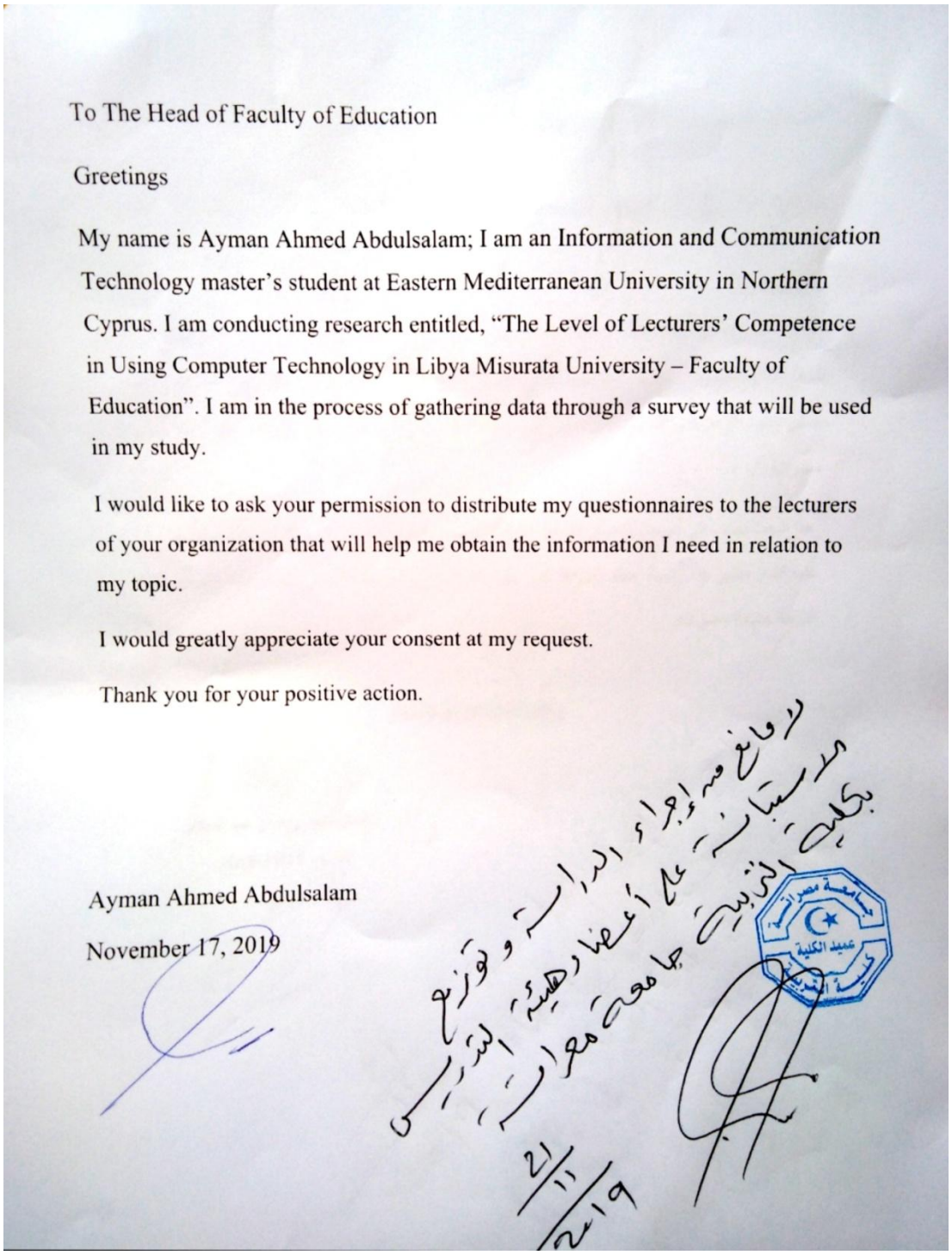
Subject: Permission for the application of my thesis research

Dear Prof. Ersun,

I would like to inform you that due to the nature of my research study, a questionnaire would need to be distributed. It would be distributed to Misurata University (Libya) Faculty of Education lecturers. The survey questions have been attached for your consideration. I would appreciate it if you consider my application at your earliest convenient time.

Thank you

Appendix F: Educational Faculty of Misurata University Approval Letter



To The Head of Faculty of Education

Greetings

My name is Ayman Ahmed Abdulsalam; I am an Information and Communication Technology master's student at Eastern Mediterranean University in Northern Cyprus. I am conducting research entitled, "The Level of Lecturers' Competence in Using Computer Technology in Libya Misurata University – Faculty of Education". I am in the process of gathering data through a survey that will be used in my study.

I would like to ask your permission to distribute my questionnaires to the lecturers of your organization that will help me obtain the information I need in relation to my topic.

I would greatly appreciate your consent at my request.

Thank you for your positive action.

Ayman Ahmed Abdulsalam

November 17, 2019

السلام عليكم ورحمة الله و بركـاته

السـيد : د. عميد كلية التربيـة

تحية طيبة وبعد...

أنا طالبة الماجيستير **إيمان أحمد رمضان عبد السلام** ، أدرس في الساحة التركية (قبرص الشمالية)، في جامعة شرق البحر المتوسط، تخصص تكنولوجيا المعلومات والاتصالات في التعليم، لإتمام دراستي أقوم بإعداد بحث علمي بعنوان" **مستوى كفاءة المحاضرين في استخدام تكنولوجيا الكمبيوتر في ليبيا- كلية التربية بجامعة مصراتة** ".

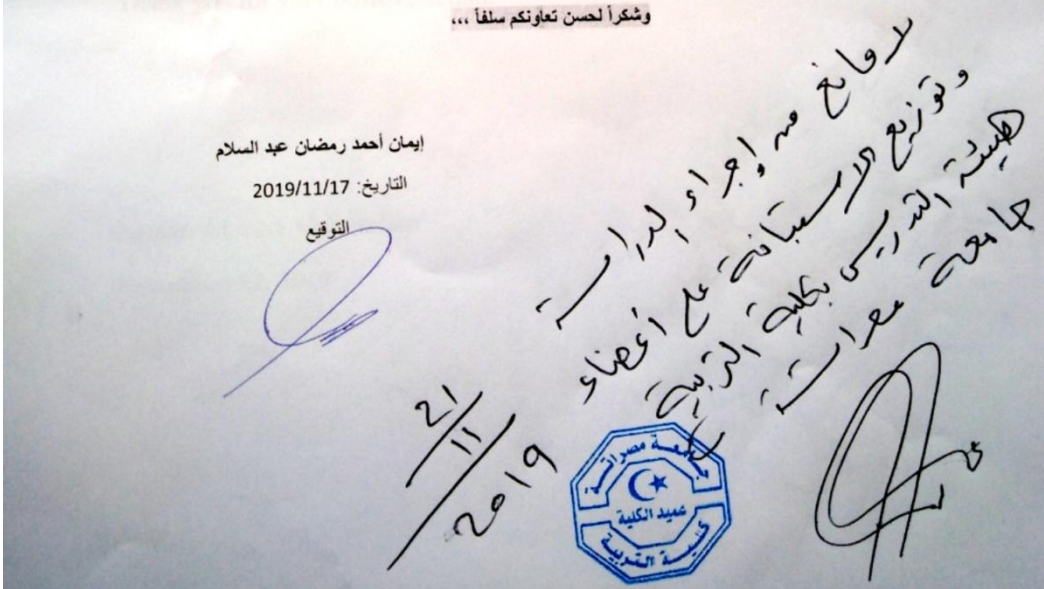
هذا البحث يهدف إلى تحسين وتطوير العملية التعليمة بإستخدام تقنية المعلومات في كلية التربية بجامعة مصراتة عليه أتقدم بطلبي هذا راجية منكم الموافقة على إجراء الدراسة وتوزيع استبانة على أعضاء هيئة التدريس بكلية التربية جامعة مصراته.

وشكراً لحسن تعاونكم سلفاً ،،،

إيمان أحمد رمضان عبد السلام

التاريخ: 2019/11/17

التوقيع



Appendix G: Ethics Committee Approval Letter

Doğu Akdeniz Üniversitesi
"Erdem, Bilgi, Gelişim"

Eastern Mediterranean University
"Virtue, Knowledge, Advancement"

99628, Gazimağusa, KUZEY KIBRIS / Famagusta, North Cyprus, via Mersin-10 TURKEY
Tel: (+90) 392 630 1995
Faks/Fax: (+90) 392 630 2919
E-mail: bayek@emu.edu.tr

Etik Kurulu / *Ethics Committee*

Reference No: ETK00-2019-0267 16.12.2019

Subject: Application for Ethics.

RE: Ayman Ahmed Ramadan Abdulsalam (18500400)
Faculty of Education.

To Whom It May Concern:

On the date of **16.12.2019**, (Meeting number **2019/29-02**), EMU's Scientific Research and Publication Ethics Committee (BAYEK) has granted, Ayman Ahmed Ramadan Abdulsalam from the Faculty of Education to pursue with his/her MA thesis work **"The Level of Lecturers' Competence of Using Computer Technology in Libya: An Example Faculty of Education in Misurata University"** under the supervision of Assist. Prof. Dr. Fahme Dabaj. This decision has been taken by the majority of votes.

Regards,

EASTERN MEDITERRANEAN UNIVERSITY * ETİK KURULU * ETHICS COMMITTEE * Gazimağusa - North Cyprus

Prof. Dr. Fatma Güven Lisaniler
Director of Ethics Committee

FGL/ns.

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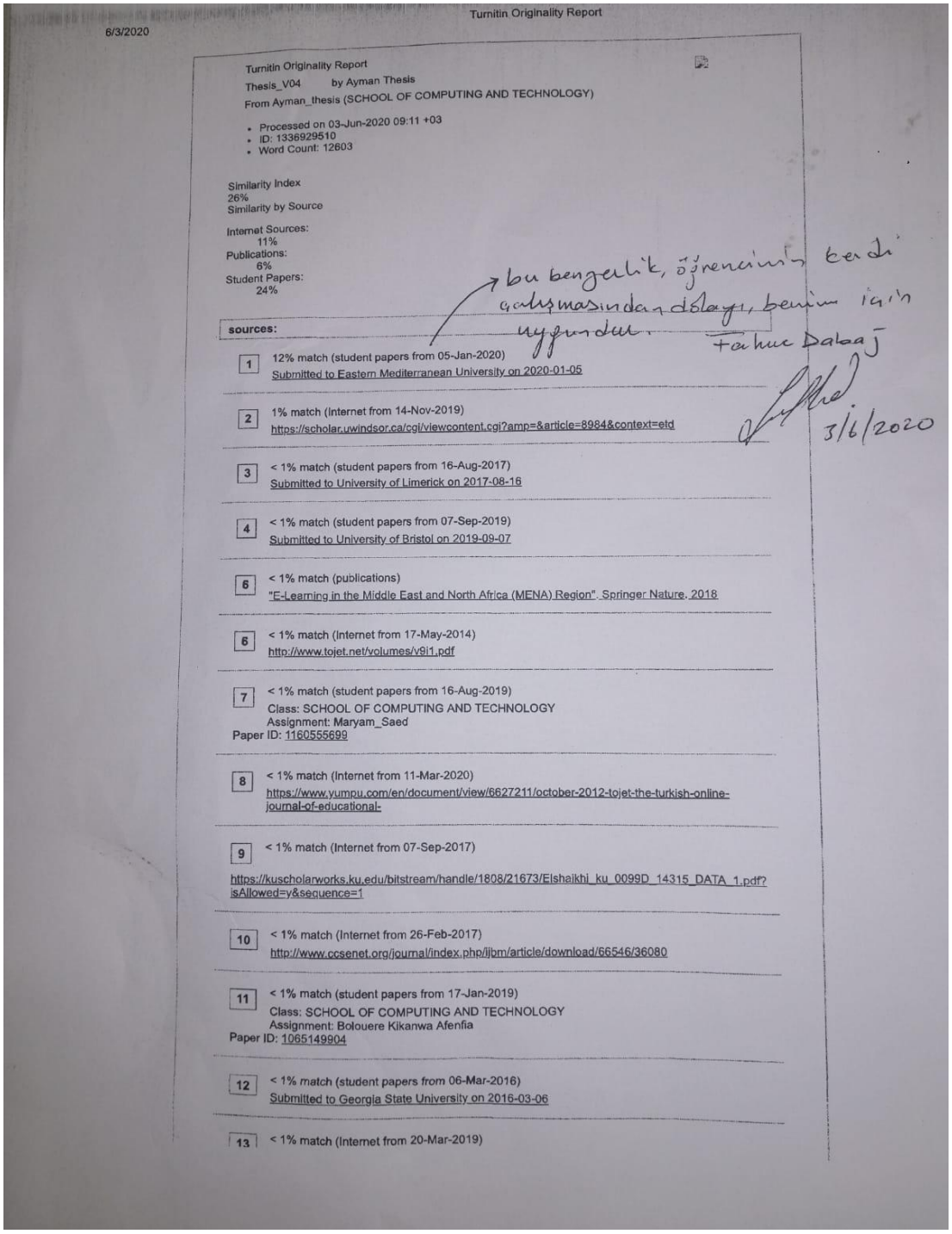
Appendix H: Originality Report



6/3/2020 Turnitin Originality Report

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