

**A Case Study of Teachers use of Instructional  
Methods in Online Learning at Eastern  
Mediterranean University**

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## **ABSTRACT**

Online learning that is defined as instruction delivered on a computer through the use of internet has been a part of educational revolution. Therefore, considering teaching methods, which teachers use for online courses, is very significant. Teaching methods specify the quality of instruction and it's important to consider which methods have already been implemented and how we as teachers can improve and change these methods in order to have a high quality and more effective online education.

In this research, the researcher investigated the existing teaching methods for two online courses which are Banking and Finance Master's program and Hotel Management Master's program. The purpose of this research is to promote online programs in EMU by altering the existing teaching methods.

**Keywords:** Online learning, Effective teaching methods, Effective teaching, Teaching programs, Reflection.

## ÖZ

E-öğrenme, bir bilgisayarda internet yolu ile verilen öğretim olarak tanımlanmıştır ve eğitim devriminin bir parçası olmuştur. Öğretmenlerin E-öğrenme kursları için kullandığı öğretim yöntemlerini göz önüne almak çok önemlidir. Öğretim yöntemleri, eğitim kalitesinin göstergesidir. Hangi yöntemlerin uygulandığını ve bu yöntemlerin nasıl geliştirilebileceği ve değiştirileceği de yüksek kaliteli E-öğrenmeye ve etkili eğitim için önemlidir.

Bu araştırmada, araştırmacı EMU'daki var olan E-öğrenme programlarının ne derece etkin ve verimli kullanıldığını araştırmıştır. Araştırma, Bankacılık ve Finans Yüksek Lisans programı ve Otelcilik Yüksek Lisans Programlarında uygulanmıştır. Bu araştırmanın amacı, öğretmenlerin DAÜ'de E-öğrenme üzerinde ki var olan öğretim yöntemlerini geliştirmeleri veya yeni bir model önerisinde bulunmaktır.

**Anahtar Kelimeler:** E-öğrenme, Öğretim yöntemleri, Etkili öğretim, Öğretim programları, yansıma.

## DEDICATION

I would like to dedicate this effort to my devoted *MOTHER* for supporting me to finish my study and for keeping my spirit up with all the innocence. Moreover, I want to dedicate it to the memory of my *FATHER* who gave me thirst for new knowledge and the potential to seek it and to my lovely *SISTER*, for her kindly guidance.

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## **LIST OF ABBREVIATIONS**

EMU	Eastern Mediterranean University
SPSS	Statistical Package for the Social Sciences
Department of B&F	Department of Banking and Finance
Faculty of TH&M	Faculty of Tourism Hospitality and Management

# Chapter 1

## INTRODUCTION

### 1.1 Background of the Study

Online learning is a method of delivering educational information without needing to participate in classes on campus. It is nothing new, the technologies which are used in online classes is relatively new. Distance learning was born many years ago when the instructor sent lessons and received students' completed assignments by mail. Nowadays online courses are modern versions of their predecessors. Over the last decade, online education has become a way for students and faculty to utilize new media and tools to learn and deliver courses. Online educational options offer endless benefits necessary to accommodate a learner for future. 21<sup>st</sup> century learners should improve their skills offered through web.2.0 which is a new version of web to succeed. Nowadays due to the changes in lifestyle, some people who are time restricted by work requirement cannot participate in physical classrooms and online education provides them opportunity to high education. Consequently, demands for online classes are increasing and most universities are offering online courses to deliver their courses in instructional design. Online learning has been the greatest revolution in contemporary education. Some advantages of online learning include:

- More comfortable learning environment
- Convenience and flexibility
- Improve your technical skills
- Lower total costs



- Variety of programs and courses
- Self-paced learning
- Variety of available sources around the world

The differences between instruction in online courses and traditional classes are evident; the methods of delivering information, the type of interactions, and evaluating the results can be much different in virtual environment compared to traditional classes. However online courses are designed to transmit the same knowledge and skills as traditional courses, therefore instructors use the same instructional methods to the online teaching environment. Some of the instructional methods are used in online courses include:

- Lecture
- Discussion
- Demonstrations
- Simulations
- Case studies
- Problem based learning projects

## **1.2 Problem Statement**

In recent years, online learning has become a major part of the educational world. Since the increase in demands for online classes and also the effects of teaching methods on the quality of instruction, investigation of instructional design methods is an essential part of the educational world. Due to the importance of teaching methods which teachers use in online classes, discovering probable problems in the implementation of existing methods is important.

The main online educators' issue is creating effective teaching methods in an online environment that foster actual learning and teaching with curiosity, energy, creativity and problem-solving skills. Nowadays existing advanced communication tools help both teachers and students to have a real chance to make their learning experience as close to regular face-to-face situation. Therefore, teachers should adopt their teaching methods in order to create more effective learning environment.

Another point to consider is examining the degree of interaction in online classes; in the way that one of the major challenges for today's online instructor includes creating the high level of interaction to develop real learning and to promote students' abilities to work in real world. Meyer (2002) examined the amount of interaction in online environment and also the effectiveness of some type of interaction in learning process and Meyer (2002) conclude that increasing interaction in online classes has significantly positive effects on student learning.

Some of the instructional methods which can enhance interaction and authentic educational experiences are:

- Promote critical thinking
- Relevant and engaging lecture
- Integrate stories into the class discussion
- Provide students with flexibility

Another point to consider is students' different learning styles. Based on research studies, students who have some specific characteristics are more successful in their online learning experiences. According to Vrasidas and Glass (2002) those

characteristics are as follow: internal locus of control, self-motivation and independence.

Furthermore, considering to the level of students' engagements in learning activities in order to gaining successful online learning is very significant. The issue of learners' engagement in activities and apply the best methods in online classes make some questions in mind. For instance, what are the best methods for supporting learners? How we can apply traditional methods in new setting? Which type of interaction should be enhanced in order to provide the best educational experiences for students? How to facilitate student collaboration? Which types of educational practices can create positive communication within the class?

### **1.2.1 The Purpose of the Study**

The aim of this research is to explore the existing teaching methods for two online courses which are Banking and Finance Master's program and Hotel Management Master's program at the Department of B&F and Faculty of TH&M and also to look into learners' perception on teachers' use of instructional methods for online learning in Eastern Mediterranean University (EMU).

The aim of research can be listed as follows:

- To reveal the teaching methods and which methods teachers use for online courses at the Department of B&F and Faculty of TH&M.
- To reveal the perceptions of students' regarding their online learning experiences.
- Assessing students' needs and their preferences in online learning environment.

- To find limitation and problems of existing teaching methods those are used by teachers for online courses.
- To suggest a more effective teaching method to teachers in orders to help them to deliver their information easily and also in order to help students to have better online learning experiences.

The data from this research has been gathered to explore the existing teaching methods in online classes, in order to improve probable problems and make it more effective. The researcher aims to investigate the following questions:

- What are the teaching methods which teachers use at the Department of B&F and Faculty of TH&M?
- Whether the techniques were employed in online learning are successful or not from the students' and teachers' perspective?
- What criteria/s should be considered to have an effective teaching method/s?
- What are the existing problems in the teaching methods of online courses and how teachers can solve them?

In this research, questionnaire and semi-interview are used for collecting data. Questionnaires were given to all the third-year students which included forty-eight students from the Department of B&F and thirty-one students from the Faculty of TH&M. Moreover, the researcher made semi-structured interview with eight instructors from both departments.

### **1.2.2 Significance of the Study**

In order to shed a light to the existing prblems in the use of teachers teaching methods in online learning there is a need for further research regarding this issue at

EMU. According to various scholars (Nguyen, 2015), (Moore, Dickson-Deane, & Galyen, 2011) solving those problems can enhance the efficiency of instruction and also can help students to have a better learning experience. Nowadays due to the increasing demands for this type of instruction, applying effective teaching methods to deliver information via computers and through online courses is really significant. In addition, learners' perception regarding online programs can affect teachers' teaching methods. As a result, considering to learners preferences can help researcher to suggest a more effective teaching method.

### **1.2.3 Assumptions**

It was assumed by the researcher that:

- Some of the students might not be willing to answer the questionnaire.
- Teachers could not be able to set up an appropriate time for the semi-structured interviews.
- The participants might not reflect their true perceptions.

### **1.2.4 Limitations**

Due to lack of online courses in the university, this research can be applied to two departments in the university which are the Department of B&F and Faculty of TH&M. The questionnaire might have been answered by students who have not taken any online courses. Students might answer some of the questions.

### **1.2.5 Definition of Terms**

Online learning; Teaching method; Interaction; Asynchronous learning; Synchronous learning.

Online learning is a type of instruction without needing to attend classes on campus. It is aimed at those who want to have a postgraduate degree while they are working

at the same time. Benson (2002) defined online learning as the last version of distance learning which enable learners to have access to educational opportunities.

According to Prince and Felder (2006), teaching methods are the principals and “strategies that an instructor might use” for delivering information and achieving instructional goals.

Interaction between students and teacher is one the most important component in distance education and it refers to action between individuals in the online environment. Jung, Choi, Lim, and Leem (2002) noted that Bates (1995) identified two categories of interaction based on time of interaction: “synchronous vs. asynchronous, and personal vs. social interaction”. Moreover, Moore (1993) provided distance education with three type of interaction including: “learner–content, learner–teacher and learner–learner interaction. These types of interaction can occur either synchronously or asynchronously”.

Teaching approaches in distance education rely on asynchronous or synchronous online teaching. In asynchronous online teaching, by guiding a teacher, students work with online materials in their desirable time. “The teacher and students are separated by time and space and are, therefore, geographically and temporally independent and diverse” while in synchronous online teaching, both teacher and students attend class at the same time. (Murphy, Rodríguez-Manzanares, & Barbour, 2011).

## **Chapter 2**

### **LITERATURE REVIEW**

This chapter will examine the meaning of online learning, the approaches which are used in the online environment and the advantages and disadvantages of this type of instruction. Finally, we will see some researches related to online learning and reflective practices.

#### **2.1 The Concept of Online Learning**

According to (Nguyen, 2015) People have known “brick and mortar” classroom as the place of learning while physical classrooms are starting to lose their exclusive possession. The term of distance education refers to the type of learning environment which students are not at school; teacher and students are in different places. The origin of distance education is mid-19th century Europe and the United States. The leaders of distance education used the latest technology of their days to help people who cannot attend the classes physically, who cannot find their preferential course at their institution, who are in a remote location, who work full time and who wants to study more independently. There are several types of distance education which are correspondence courses, telecourses, CD-ROM courses, online learning and mobile learning which the most popular tools is online learning. According to (Moore, Dickson-Deane, & Galyen, 2011), the terms ‘online learning’ and ‘distance learning’ are used interchangeably while they have different meanings. Distance learning is more general compared to online learning and online is the latest version of distance learning. Therefore, online learning can be said more specific to distance learning.

Online learning is described by most authors as access to learning experiences via the use of the internet. The internet has made online learning possible and teaching and learning have gone beyond the classroom wall with technology and the potential of technology in the educational world has eliminated the limitations for learning. The internet has given opportunity to teachers and learners to work online and many of teachers are interested in online learning to improve their students 'skills more effectively and to gain their educational objectives much easier. Online learning has been popular because students utilize and access content and instructional materials more flexible and students around the world are enthusiastic to much identify online learning environment. Consequently, demands for online courses are increasing. For example, according to U.S. Department of Education, National Center for Education Statistics (2016) in fall 2013, there were 5,522,194 students enrolled in any distance education and online enrolments continue to grow around the world. Online learning is a great revolution in learning world from inactive lecturing and passive students to more interactive learning environment.

## **2.2 Online Learning Approaches**

Online learning can be fully online and blended learning with face to face interaction. Fully online is a form of online learning which all of the instructional activities include presenting materials and assessment take place through the internet. However, blended or hybrid learning approach compose of face to face interaction and online. Moreover, the two approaches to online learning include asynchronous and synchronous methods. In Synchronous learning approach, the participants interact and collaborate at the same time and in the same virtual space. Participants are involved in direct interaction by asking and answering questions in real time. Asynchronous learning approach takes place anytime and anywhere. Participants are



not expected to engage in instruction in real time and learning does not to be scheduled as a synchronous approach. It is a flexible and convenient method for people who combining education with other commitments.

## **2.3 Benefits of Online Learning**

The web based learning provides a significant scientific environment which in students and teacher can exchange information more easily. The web increases opportunity for learning because students have access to diverse conventional information and topics. It helps students to develop their knowledge and improve their 21<sup>st</sup>-century skills. Online learning as latest and newest version of distance education performs a significant role in the world of education today. The numbers of students who are enrolling in any distance education course are increasing. There are many advantages and uses of online learning that will be mentioned in the rest of this chapter.

### **2.3.1 Cost-Effectiveness**

The cost of education especially postsecondary education is increasing faster than the inflation rate and the issue of education cost has been a big challenge for students. As (Nguyen, 2015) noted that “as of 2014, the total national student loan debt is over one trillion dollars”. Educators believe that online learning can decrease the cost of education because the cost of class spread over much larger number students compared to the traditional classroom. However, it can be said that, the large number of students can affect the quality of education but teachers can solve this problem by using appropriate tools and teaching methods. In the same way, the marginal cost of a student includes the cost of transportation, and the requirements for the physical classroom are negligible compared to a traditional classroom.

### **2.3.2 Effectiveness in Educational Outcomes**

Riffell and Sibley (2005) proposed that the most significant benefit of online format of education is the effectiveness in educating students. It is found that students who had online classes gained better result compared to face to face classes. Results include higher scores, students' engagement in learning activities, having more meaningful learning and deeper understanding of courses. Nguyen (2015) found out that "students who learned in blended format have the stronger sense of community and better outcomes compare to the traditional format".

### **2.3.3 Providing a World Class Education**

According to (Nguyen, 2015) providing a world-class education is the most attractive aspect of online learning. Students who have different skills, information, languages, and cultures come to study and it's a valuable training experience for students. Online education eliminates restrictions and borders. Students from anywhere at any time who have problem with their geographic situation and who have time limitation can attend online classes.

### **2.3.4 Rich Feedback and Evaluation**

Easy communication in online learning environment cause students receives feedback from their classmates and teachers more easily. Teachers use some tools to put their result of tests and homework in a web page and it provides each student immediate feedback. Student access to grades of other classmate and they can assess their own performance. Additionally, online courses enhance teachers' ability for measuring the results by using specific tools and techniques. As Appana (2008) mentioned that existing effective software and meaningful application has promoted the reality in evaluation.

### **2.3.5 Student Interaction and Satisfaction**

Results of many previous researches have shown that online learning can provide a student-centred learning environment and enhances interaction between students. Appana (2008) believes that the level of interaction in learning environment defines the course quality and satisfaction. Roblyer and Ekhaml (2001) have explained that students' satisfaction is positively impacted by providing three main conditions which are (a) using convenient technologies (b) designing course in order to support learner-centred instructional technology (c) determining the role of the instructor as a facilitator in class. Furthermore, due to the development of online resources online environment provide rich resources for online learners. Students access a wide variety of resources related to their knowledge area including online journals, relevant websites, and online libraries (Thurmond, 2003).

Instructors can use different tools such as specific software which are designed for an online environment. Yerk-Zwickl (2003) explained that "Centra Symposium" is a collaboration software that has been used in distance teaching and learning. This software provides a web-based environment that can support live instructions, presentations and meetings and it can be used for creating a suitable and ideal environment for "highly interactive team collaboration, virtual classroom and hand-on training applications".

## **2.4 Disadvantages of Online Learning**

### **2.4.1 The Lack of Control**

According to (Smaldino, Lowther, & Russell, 2008) unfortunately, there is no organization or agency to control individual activities, discussed topics and new websites which are added to the internet daily. Control is in the hand of individuals.

Everything is posting on the internet without the restrictions. Therefore, students might access information whose ages are not appropriate and too advance for their understanding. In addition, many numbers of new websites are adding to the internet daily. It can cause risk of information overload. Students might attack by the high volume of information on the internet. Consequently, finding relevant information can be difficult since there is no teacher in online classes to filter information. Diversity in online data might truly confuse young students. Another point to consider is verifying an online program's accreditation. Due to the lack of control on the internet, the number of accredited schools is increasing which earn money illegally and involve fraud. Students must check the validity of online program by using accrediting agency.

#### **2.4.2 Copyright**

Copyright is one of the main legal issues that can cause trouble in online education. Because accessing and downloading information is really easy, individuals can illegally appropriate files with little changes in their concept while it's not their own work.

#### **2.4.3 Ability to Access Course Materials**

Expanding online courses need to design the course by considering the availability of software and hardware to students. Students without access to adequate technology who live in smaller Country may not to be able afford new computer equipment.

(Flye, Gibson, Seemann, & Wilkinson, 2002) discussed that although nowadays people are making effort to put computers in college classrooms, the number of computers is not sufficient. Many of learners don't have access to the machine in their classrooms and in their homes. Electronic equipment is limited for many

learners and it causes a competitive condition between students who have access to technologies and who don't have.

#### **2.4.4 Time Consuming**

Bartolic-Zlomislic and Bates (1999) discussed that online learning and teaching can be time-consuming because of large amounts of readings (discussion forums) and writing required. Instructors need more time for providing materials and responding to students. Online education is not suitable for individuals who are not particularly good at time management and they should stay away from web based learning.

#### **2.4.5 Technical Support**

An online environment needs technological expertise to be readily available. Someone should provide web server access, necessary hardware and run software for holding online courses. Any kind of problem/s on a network can shut down online classes therefore probable technical problems should be estimated by educators in advance. Probable technical problems might occur during the classes. Those problems are troublesome in the case of video conferencing and virtual meeting. Issues such as internet speed and limited bandwidth which affect the quality of video and sound should be concerned in online classes. Consequently, establishing high-quality equipment before starting an online course by technical expertise is very significant. For instance, limited bandwidth means slower performance. Delivering educational materials such as video, sound and large graphics through the internet needs high speed and high bandwidth.

### **2.5 Related Researches**

Gómez-Rey, Barbera, and Fernández-Navarro (2016) measured the quality of the online learning experience based on the Sloan-c model which focuses on five main pillars. It is found out that considering to the combination of two educational

stakeholders' perceptions (both teachers' and students' perception) in order to measure the quality of online learning experience is very significant. Moreover, researchers proposed that for teachers the social attendance and the level of interaction between instructors and for students the satisfaction of learners and the ability of transforming information are the most important variables. Consequently, while teachers focus on the importance of the collaborative learning, students think about their own learning benefits.

Marsh, Lammers, and Alvermann (2012) examined online courses at two large research universities based on two elements: "(a) materials and activities that involved the participants in analysing, synthesizing and evaluating their course work and (b) art factual evidence of the online interaction among the participants.". It is found out that using appropriate data sources, methods and tools such as discussion board posts, PowerPoint presentation and related articles in the online modules, online discussion groups and partner feedback forms provided students opportunities for analysing, evaluating and synthesizing information and knowledge during the instruction. Students could question textual authority in relation to their disciplines. It is argued that "participants' engagement with course content, other participants and the instructors provides evidence that they are capable of analysing, synthesizing and evaluating course reading, materials and activities in relation to their understanding of literacy and disciplinary teaching".

Providing a strong framework for online learning depends on three critical elements that are content, learning activity and learning support. These elements lead instruction to a student-centred approach and implement Constructivism as a theory that describes how learning takes place. It is emphasized that teachers should look

critically at the online teaching and learning strategies because the lack of effective teaching strategies sometimes acts as impediments to successful learning. Additionally, creating contexts and activities for technology base learning by using appropriate tools engender cooperative and collaborative learning environment, as shown by Oliver (1999).

Alvarez, Guasch, and Espasa (2009) examined the role of university teachers and their competencies in the online learning environment by reviewing 16 design of university teacher training task from European universities and experiences from a sample of 101 university teachers in the form of discussion groups. It is found that instructors need to adapt their competencies and abilities for new learning environment and also their role has been changed from an expert to a facilitator. Researchers noted that based on three directions, the roles of teachers are unique in virtual environment. Those directions are: “(1) planning and design role; (2) social role; and (3) instructive role” .Performing these roles require a set of competencies that depend on the role and also depend on the level of complexity of task.

The ways of presenting information by teachers are instructional methods. Teaching methods are the factors that specify the quality of education. Teachers must select the best method to maximize students' learning, thinking and activities, in order to enhance their ability to learn and develop their ability to think and also to enhance the interaction between students and their ability of innovation. Therefore, it is important to consider what methods have already implemented and how we can improve and change these methods to have a high quality and more effective instruction. In the same way, effective online instruction depends on teaching methods appropriately designed. Teaching methods exist which apply to traditional

higher education learning environments, and when designing courses for the online environment, these methods should be adapted to the new environment. One of the most effective teaching methods is reflective teaching method in classes. In the following part reflective teaching practices will be presented.

## **2.6 Reflective Practice**

The terms "reflection" and "critical reflection" have increasingly appeared in descriptions of approaches to teacher education. It is a method of developing training skills and competencies. Lieberman & Miller (2000) cited in Sandhya Reddy (2014) pointed out that reflective teaching, reflective inquiry, and reflection-on-practice helps teachers to improve their professional skills which is very important to be an effective teacher. Every teacher has own idea about the way of teaching according to his/her experiences or his/her beliefs. Reflecting on teaching practice helps teachers to evaluate their own teaching methods to make them more strong and effective.

Copeland et al. (1993) identified 12 critical attributes of a reflective practitioner. These include attributes relating to the identification of problems, the generation of solutions, the testing of solutions and learning from reflective practice. Teachers use this process to develop and reconstruct their understanding of an aspect of professional practice. Other attributes of the reflective practitioner have been identified as viewing oneself as a resource, using relationships with other teachers as resources and being aware of different kinds of knowledge from which to seek assistance.

One idea that consistently emerges from the various definitions of reflective practice is the notion that students have to be aware of and able to monitor their own thinking,



understanding and knowledge about teaching in order to be a reflective practitioner. Reflective practitioners are able to identify a problem in their practice, the term 'problem' here meaning a situation/issue where there is some doubt about how to proceed (Parsons & Stephenson, 2005).

In the following part, the philosophical stance of the researcher, research method, research design, data collection instrument, population, data collection period, validity and reliability of research and finally data analysis is going to be presented.

## **Chapter 3**

### **RESEARCH METHODOLOGY**

#### **3.1 The Philosophical State of the Researcher**

In the general sense, any thesis or opinion falls into a specific philosophical position. A philosophical position is a set of opinions that describes a specific philosophy. Current research which is about improving online teaching method falls into positivism philosophical position.

The main goal of online education is to provide “educational opportunities” for whom without access to educational institutes. Online learning is a type of distance education by using computer and internet as the delivery method (Kentnor, 2015). According to (Kim & Bonk, 2006) technologies for online learning are emerging and “advance in internet technology” are likely increase the use of more advanced technology in online education. Recent studies indicated that online learning has become a popular strategy in education and because of the rapid growth of online education, considering to online teaching and learning methods in order to enhance the quality of online education is very significant. Nowadays, technology and education seem inseparable and educational research within the concept of this area is very significant. As it is mentioned above, this research falls into positivist position because, in fact, positivism is a rejection of metaphysics and based to positivism the objective of knowledge is to describe the events that we experience. The aim of science in this position is to “stick what we observe and measure”. In the

concept of positivism, science is the way to gain truth and also to realize the world is excellent and so it might be estimated and controlled. The world and universe are definitive, they worked by laws of cause and effects which we can perceive them based on the type of scientific methodology. Thus, science is a mechanical circumstance in positivism. We can use a deductive argument to assume speculations that can be tested. According to the consequence of this research, we might understand that a theory does not coordinate with the facts and it should be revised to better forecast the truth. Positivist believes that all knowledge is derived from sense-experience and the main part of scientific efforts is experimentation and observation. Recognizing natural laws by direct control and manipulation is the key methodology of the scientific method (Krauss, 2005).

## **3.2 Research Methods**

Distinguishing between qualitative and quantitative research approach is a methodological issue and choosing a specific methodology depends on our research questions. Both qualitative and quantitative approaches are used in this research. Qualitative and quantitative approaches are going to be presented in the rest of this chapter.

### **3.2.1 Quantitative Research**

Quantitative research method can be defined as a method that uses numerical data to explain phenomena. Mathematical methods, especially statistics are used to analyse numerical data. This type of research method experiments a theory including numerical variables in order to discover if the theory explains or estimates desired phenomena. Quantitative research seeks to expand expository global laws based on statically measuring assumptions which are expected to be a static reality. It considers to a resolution of the casual relationship between abstract variables within

a framework that is rational, definite and free from criteria imposed by standards based on previous theories. A quantitative approach subscribes that, psychological and social phenomena have a visual reality that is free of the subjects being studied. Hence, researchers consider the distance between themselves and what is being studied. In a qualitative research, researchers use a pre-constructed instrument into a study which is fit to the different experiences of participants. They randomly select a large representative samples in order to generalize their finding.

The major strength of this method is to facilitate comparisons and statistical association of the data because it allows one to analyse the answers of a number of participants to a bounded set of questions. The collected data from questionnaires allows researchers to discover a general view of participants' perception of a particular program. Quantitative methods and procedures help researchers to catch a wide extensive set of findings and then deliver those findings compactly. However, they cannot provide insight into the participants' individual experiences because they need a deductive approach and predestine collection of standardized responses according to theory. They do not ask participants' belief, feeling and experiences with their own word. Participants answer to a set of specific questions in quantitative research. As a result attributing the meaning participants to study is largely ignored. Researchers in a quantitative research use questionnaires, surveys and measurement materials including numbers. They analyse collected data by mathematical models and statistics and then deliver their results by using numbers (Yilmaz, 2013).

### **3.2.2 Qualitative Research**

Qualitative research is an effective approach that researcher can explore human experiences in both personal and social context in order to know what affect these experiences(Gelling L, 2015). Qualitative researchers can use different tools and

methodologies. Depending on the subject of research, qualitative researcher can “adapt a grounded theory, phenomenological or ethnographic”. How researcher wants to collect data and analyses them needs to be considered in this method. Qualitative research explores constructed social and psychological experiences through a flexible and descriptive framework in order to understand how these experiences created and given meaning. The purpose of this method is to explore a specific subject according to the participants’ experiences by collecting data from these participants through observations and interviews. Another point to consider is the effect of participants’ perceptions and the meaning that they attribute to their experiences regarding a research topic on the final findings in a research study because they can freely describe their experiences through interview or observations. In the context of qualitative research, knowledge is depended on knower and socially constructed. There are multiple interpretations on any subject because the realities are constructed by multiple cultural groups with different views.

However, researchers usually use interview in order to generate data in qualitative research which may be structured, semi-structured or unstructured. Other ways to generate data are: discussions or focus groups, reflective field notes, observations, texts, and pictures. Data gathered through qualitative methods is often presented in the form of a case study.

### **3.3 Research Design**

#### **3.3.1 Case Study – Research Strategy**

According (Robson (2002)) a case study is investigating specific contemporary phenomenon including its real life content by using a variety source of evidences. VanWynsberghe and Khan (2007) examined different definitions of case studies which refer it as a strategy, method, research design or methodology. Researchers

believe that although some definitions call case study as a method would point that case study is a procedure for collecting data, this is an approach that uses different research techniques such as interviews, observations and document analysis in order to collect data.

In this research, case study approach is used to explore online teaching methods which are used for online courses and also to reveal students' perceptions regarding online programs in EMU. Choosing case study research strategy could be attributed to a number of reasons. As Yin (2003) proposed that case study is an effective method when our questions include "how" or "why" and also when researchers don't have control over current phenomenon. The research should have some properties in order to be categorized as case study. Case studies focus on specific and small sample size and analysing lots of data is not more effective in a case study research. Moreover in case studies, researches provide high detailed information and contextualized analysis of a sample such that readers can comprehend an instance in action. Case studies are being used in natural setting and researchers choose this strategy when they don't have control over events and behaviours. Working in a distinctive environment enable researcher to develop focused hypothesizes and learn new lessons during data collection and analysis. Case studies use different methods for collecting data such as interviews, questioners and participants' observations. Consequently, multiple data sources help researchers to find more accurate results.

### **3.3.2 A Case Study of Eastern Mediterranean University, North Cyprus (Department of B&F, Faculty of TH&M)**

The purpose of this case study is to explore teaching methods that instructors use for online courses and also to look into learners' perception on teachers' use of instructional methods for online learning'. The population of this research includes

teachers and students from the Department of B&F and Faculty of TH&M Management at Eastern Mediterranean University. The researcher investigated students' perceptions through questionnaire on online teaching and learning methods. Considering the use and application of teaching methods and techniques, instructors were interviewed to explain their teaching methods and techniques that are used by them in details and to describe the advantages and limitations of online courses. Examining in depth both students' and teachers' perceptions helped the researcher to suggest an alternative way to alter the current existing teaching and learning methods in online courses.

### **3.4 Data Collection Instrument**

Any occupation needs some appropriate instruments for achieving determined goals. As a surgeon requires specific instruments and tools for surgery, a researcher need some instruments for collecting needed data. Based on the case which is under taken research, researchers use different methods of data collection such as questionnaire, interviews, focus groups, tests and etc. The current research used questionnaire and semi-structured interview as instruments for collecting data about the students' perceptions regarding online learning in EMU and teachers teaching methods. The semi-structured interview was conducted by researcher according to the written research questions. Furthermore, the semi-structured interview was piloted with teachers before actually putting into process.

#### **3.4.1 Questionnaire**

Using different types of questionnaire for collecting data is a common practice in a research study. paraho (2014) defined a questionnaire as an instruments including some questions that instructors use for discovering students' perceptions regarding an specific issue. Researchers usually use questionnaires to collect data about

participants' experiences, beliefs and perceptions and this is an appropriate method for a sensitive subject that respondents prefer to be anonymous. The structure of a questionnaire and also the number of questions depend on research questions which should be clear and realistic. Reliability and validity of a questionnaire show the practical value of a questionnaire. Conducting a questionnaire is a complex task and providing a questionnaire that helps researchers to meet the objective of a study requires skill and knowledge about a key issue.

### **3.4.2 Semi-Structured Interviews**

Psychologically people are interested in the way that other individuals think and believe. For this reason interviewing can be the most interesting way to collect data in a qualitative research. This qualitative collection method has been used in extensive literature focusing on different topic and issue. Even in a quantitative research, researchers can use the interview as a pilot study in order to collect data before designing survey. The purpose of qualitative research interview is to add or improve the concepts in the body of knowledge based on participants' experiences. During an interview, you can find out what other people think and feel about a specific subject that you are interested in. The information which interviewer wants to know is variable depending on research questions and disciplinary perspective of the study. Those researchers that examine prior hypotheses use different interview format of those produced hypotheses. (DiCicco-Bloom & Crabtree, 2006).

Conducting an interview is not a simple task and interviewers need some specific skills such as "intensive listening", "note taking", "careful planning" and "sufficient preparation" (Qu & Dumay, 2011). Making decisions carefully about the process of an interview such as the number of interviewees, type of interview and data analysing must be considered by researchers.



Researchers must develop their own knowledge in order to gather useful data and to ask informed questions. Sometimes understanding the world of others during the conversation may be difficult because of different world view and cultural meaning of people.

There are three categories of interviews including structured interview, unstructured and semi-structured interview. Qu and Dumay (2011) noted that semi-structured interview consist of prepared questions with a defined theme that can evoke more elaborate responses. This method is a popular method because of flexibility, comprehensibility and accessibility of this method. Moreover, revealing the significant and often hidden issue of human and their original treatment is the most important ability of semi-structured interview. Semi-structured interview organized based on predetermined open-ended questions and other probable questions which may interviewer ask during an interview.

### **3.5 Population**

Both Instructors and students (third year) from the Department of B&F and Faculty of TH&M are the participants of this research. At the beginning, teachers have been interviewed by researcher in order to collect data about their teaching methods in the existing online courses at EMU. Then on voluntary basis students have been given questionnaires.

Table 1: The Number of Participants

<b>Departments and Participants</b>	<b>Number</b>
Students from Faculty of TH&M	31
Students from Department of B&F	48
Teachers from Faculty of TH&M	4

Teachers from Department of B&F	4
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### **3.6 Sampling Techniques**

When carrying out a research, we can use different methods of sampling. Sandelowski (2000) explained that researchers can use a combination of purposeful and probability sampling techniques and categorized sampling technique as follow: Criterion, Random, and Stratified purposeful sampling.

It is obvious that making especially regarding semi-structured interviews with all of the participants in a research requires a big effort and sometimes it's impossible because of time and money constraint. Therefore, researchers usually gain data from a small part of the participant by using one of the sampling methods according to their subject area. Making a right choice of the population is significant in order to draw a good conclusion. In random sampling method all the elements of participants' have the equal probability of being selected to belong to the sample.

By using random sampling method the researcher has formed the population of the research.

### **3.7 Data Collection Period**

A formal letter (see Appendix A) has been written to the head of Department of Computer and Instructional Technology Teacher Education in order to apply the questionnaire and semi-structured interviews with students and instructors at the Faculty of TH&M and Department of B&F in Eastern Mediterranean University. A copy of semi-structured interviews and questionnaire were attached to the head of

department's consideration. Another formal letter which is called 'Scientific Research Ethics Compliance Application Form' was submitted to the chair of Ethics Committee by the researcher in order to get permission to carry out this research (see Appendix B). Data collection period has lasted one semester from fall till spring approximately four months.

### **3.8 Validity and Reliability**

Researchers should prove the accuracy of data and instruments in a research which includes the reliability and validity of data in a research. It is necessary for both qualitative and quantitative types of research to test and represent that their research is valid. Golafshani (2003) examined the reliability and validity of both qualitative and quantitative researches. The researcher noted that "credibility in quantitative research depends on instrument construction" while validity and reliability in a qualitative research refers to the ability and skills of a researcher. Moreover, in quantitative research the meaning of reliability is whether the result is replicable and validity to the level of consistency of results over time and validity means to what extent the process of measurement is accurate.

Messick (1987) defined three types of test validity as follows; content validity, predictive and concurrent criterion-related validity, and construct validity. As a reflective researcher, content validity is used for both questionnaire and semi-structured interviews with students and teachers. The semi-structured interview questions have been piloted by researcher before actually putting into process in order to reinforce the validity and reliability of the instruments. The other instrument which is used to gather data was the questionnaire which was taken from "Effective Online Instructional and Assessment strategies" by (Gaytan & McEwen, 2007).

### **3.9 Data Analysis**

The purpose of analysing data is examining, cleansing and modelling collected data in order to gain usable data regardless whether data is qualitative or quantitative. SPSS program is used to analyse the quantitative data with the guidance of an expertise. According to Howell (2010) SPSS is a windows-based program for entering and analysing a large amount of data and also this program is able to perform all of the analysis existing in the text. Moreover, considering to semi-structured interviews, the researcher used content analysis to analyse the data. Content analysis is one of the multiple research methods for analysing data which are collected from a particular interview. In this type of qualitative data analysis, collected data is classified to themes and sub-themes in order to have an easier comparison. The main purpose of the content analysis is to identify the properties of a large amount of textual data such as finding the repetition of most used keywords. According to (Hsiu-Fang Hsieh & Sarah E. Shannon), qualitative content analysis is interpretation of the content of text data by using a process of coding and recognizing themes that includes three different approaches as follow: “conventional, directed, and summative.” All of these approaches interpret text data from a mainly naturalistic model and they have the same analytical process of some steps in common. The most important step in this process is predetermining and implementing the coding process and then analysing the result of the coding process. The process of coding specifies whether a content analysis is successful or not. Organizing a large amount of textual data into much fewer content categories is the fundamental coding process in content analysis.

## **Chapter 4**

### **RESULTS AND FINDINGS**

#### **4.1 Results & Analysis**

As a methodology, qualitative and quantitative approaches are used (mixed approach). The researcher used questionnaire and semi-structured interviews in order to gather data from students and teachers at the Faculty of TH&M and Department of B&F.

Firstly, the researcher had carried out the semi-structured interviews with instructors who had experience on online teaching in their academic career in order to provide complex textual descriptions of how instructors experience an online course. The researcher obtained qualitative data through eight interviews: four instructors from Department of B&F and equally four instructors from Faculty of Faculty of TH&M. Instructors were asked seven questions and in advance arranged a suitable day and time for the semi-structured interviews. Secondly, the questionnaire was given to all the third-year students which included forty-eight students from the Department of B&F and thirty-one students from the Faculty of TH&M. In order to analyse the questionnaire SPSS is used with the guidance of an expertise and semi-structured interviews are analysed through content analysis.

In this report the results of data analysis which has been done based on the survey carried out among the students of two departments (Department of B&F and

Department of TH&M) at EMU are going to be presented. The survey includes 20 qualitative questions asking students' opinions about the effectiveness of methods which are applied in the online courses. Answers are provided through 5-point Likert scale in a way that 1 represents "Strongly Disagree", 2 represents "Disagree", 3 represents "Neutral", 4 represents "Agree", and 5 represents "Strongly Agree".

The number of students surveyed is 79 in total; 48 students from the Department of B&F and 31 students from the Faculty of TH&M. The aim of study is not only to have a statistical description about the students' opinions but also comparing the two departments in answering the questions. The difference between the numbers of surveyed students from each department (48 vs. 31) should be kept in mind during the comparison and the results from Department of B&F students are more reliable in compare to the results from TH&M students.

## **4.2 Comparing Mean and Standard Deviation**

In this section the researcher had carried out comparison by considering the Mean and Standard Deviation values of answer sets. In general, all the means in all cases (only for Department of B&F, only for TH&M, for total students) are above 3.0 (except Q6 for Department of B&F) showing the average agreement of students to all questions (see Table 2).

In 19 out of 20 questions the means of TH&M students' answers are higher than B&F students. The only question which is less agreed among TH&M students is question number 7,( i.e. presenting case studies and articles on web pages is an effective method in online classes) with the difference 0.05 which is absolutely negligible (underlined in Table 2). Q1, Q6, and Q20 are more agreed among TH&M

students with the difference higher than 0.5 score (highlighted in Table 2). However, the biggest difference is for question 1, with the difference 0.79 score. Q16 has the highest average agreement (3.88) among B&F Students, i.e. Moodle provides an organized interface for online courses, and Q15 has the highest average agreement among TH&M and All students (4.29 and 3.99 respectively), i.e. Students think that “appropriateness of technology tools” in order to deliver course materials is significant (highlighted in Table 2). In general B&S students' answers have more standard deviations than TH&M students' answers showing more convergence for TH&M students. The highest and lowest standard deviations are marked in Green. Q3 (Online classes can be implemented in both forms of synchronous and asynchronous communication) among all and B&F students, and Q15 (Students think that “appropriateness of technology tools” in order to deliver course materials is significant) among TH&M students have the lowest standard deviations. As Q15 among TH&M students has the mean 4.29 with standard derivation 0.693, it shows that TH&M students strongly believe that “appropriateness of technology tools” in order to deliver course materials is significant.

Table 1: Mean and Standard Deviation

	B&F		TH&M		Average	
	Mean	Std. D	Mean	Std. D	Mean	Std. D
Q1. Students think that the instructional methods that instructors use in their online courses are same in virtual environment and traditional classes.	3.08	1.127	3.87	.885	3.39	1.103
Q2. Instructors are using the latest instructional methods in online courses.	3.42	1.069	3.74	1.094	3.54	1.084
Q3. Online classes can be implemented in both forms of synchronous and asynchronous communication.	3.67	1.018	4.10	.831	3.84	.966
Q4. Existing teaching methods are student-centred and engage students in learning activities in online courses	3.33	1.191	3.58	.958	3.43	1.106
Q5. Students think that existing teaching methods provide adequate collaboration and interaction between students in online courses.	3.29	1.148	3.74	1.032	3.47	1.119
Q6. Online courses engage students in discussions, collaborative work and problem solving.	2.98	1.280	3.55	1.234	3.20	1.285
Q7. Presenting case studies and articles on web pages is an effective method in online classes	3.73	1.180	3.68	1.166	3.71	1.167
Q8. Online lectures are an effective instructional method in online courses.	3.56	1.413	3.90	1.300	3.70	1.371
Q9. Participating in discussion forums in online classes help students to explore their own understanding from knowledge	3.81	1.065	3.94	1.063	3.86	1.059
Q10. Create small group works in online courses develop learners' team working Skills	3.71	1.398	4.13	1.147	3.87	1.314
Q11. In online courses, continuous, immediate and brief feedback is required in order to improve students' understanding, learning from their mistakes and success.	3.71	1.166	4.03	.983	3.84	1.103
Q12. Students have access to a variety of resources such as online databases, experts, and libraries from anywhere.	3.77	1.207	3.87	1.204	3.81	1.199
Q13. Using appropriate tools and technologies can enhance the quality of interaction in online classes.	3.83	1.078	4.10	.746	3.94	.965
Q14. Students are using current technologies such as Facebook and YouTube in their online courses	3.71	1.288	4.06	1.093	3.85	1.220
Q15. Students think that "appropriateness of technology tools" in order to deliver course materials is significant	3.79	1.091	4.29	.693	3.99	.980
Q16. Moodle provides an organized interface for online courses.	3.88	1.178	4.10	1.012	3.96	1.115
Q17. When email is used between instructors and students interchangeably, it can aid instructional process.	3.81	1.363	3.90	.978	3.85	1.220
Q18. Synchronous learning methods involve different new communication tools.	3.65	1.229	3.90	.978	3.75	1.138
Q19. Students think that probable technical problems may be troublesome and they need to improve their technical skills before starting online course.	3.71	1.051	4.00	1.065	3.82	1.059
Q20. A variety of instructional strategies are being used to support different learning styles of students.	3.65	1.139	4.16	.735	3.85	1.026



### 4.3 Bar Charts

In this section, the percentage-based bar-charts show the distribution of the answers for each question separately comparing between the two departments. In order to simplify the researcher alias "BF" for the Department of B&F and alias "T" for the Faculty of TH&M. The phrase "general agreement" denotes the answers "Agreement" and "Strongly Agreement" together and the phrase "general disagreement" denotes the answers "Disagreement" and "Strongly Disagreement" together

For Q1, BF students are more disagree in compare to T students. The general agreement among T students is much higher than the general agreement among BF students

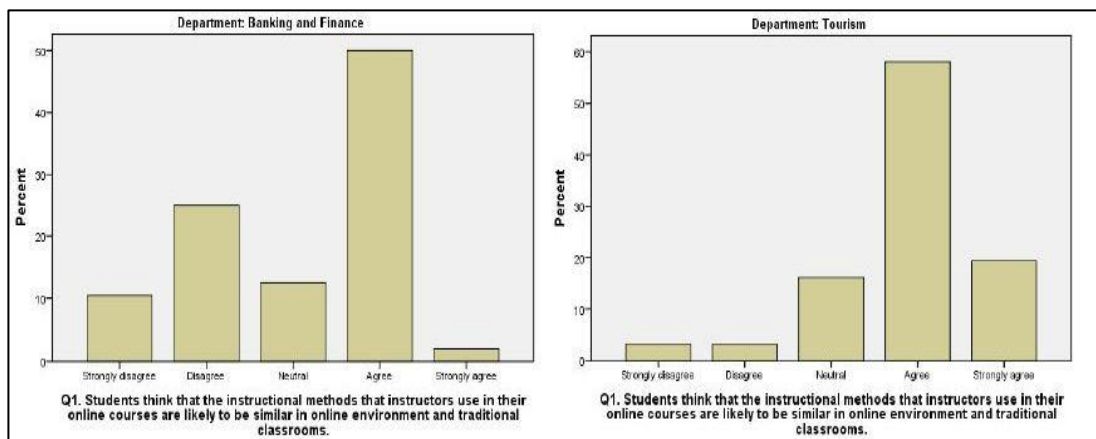


Figure1: Q1.Students think that the Instructional Methods that Instructors use in Their Online Courses are the same in Virtual Environment and Traditional Classes

For Q2, the distributions of answers among both departments BF and T are almost similar.

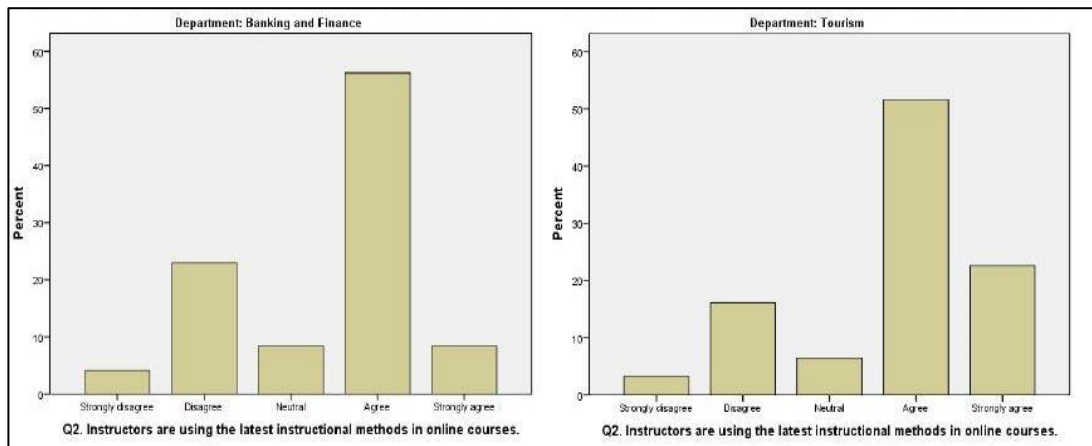


Figure2: Q2.Instructors using the Latest Instructional Methods in Online Courses

For Q3, the distributions of answers are generally similar except for general disagreement with the total of 15% among BF students versus 7% among T students.

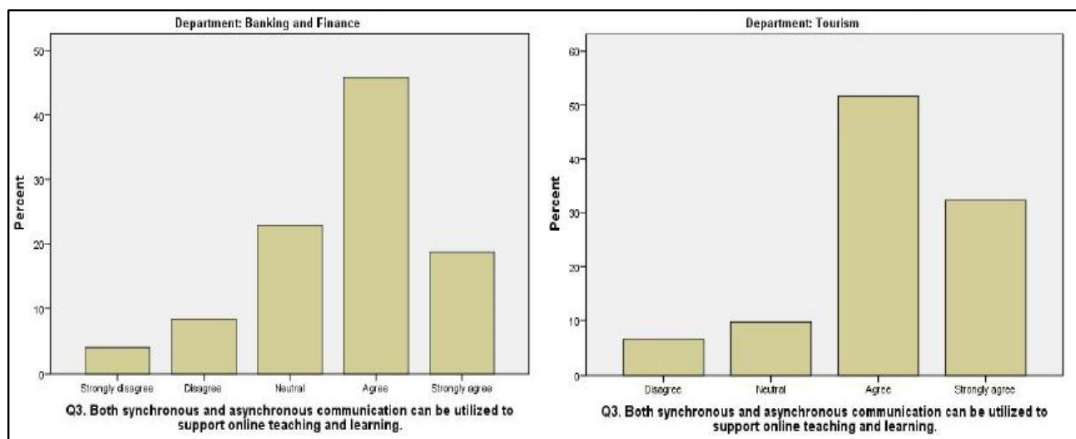


Figure3: Q3.Online Classes can be implemented in both Forms of Synchronous and Asynchronous Communication

For Q4, the distributions of answers are generally similar; however, BF student are more disagreeing with the question.

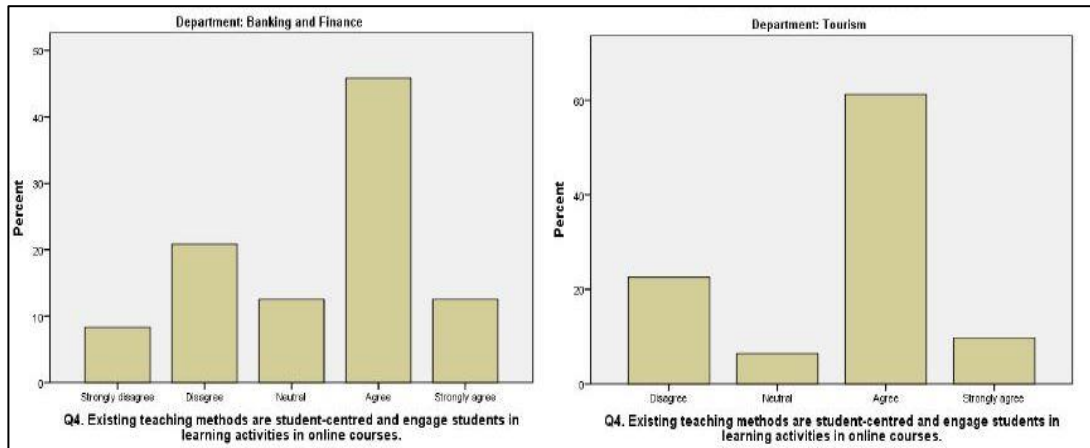


Figure4: Q4.Existing Teaching Methods are Student-Centred and engage Students in Learning Activities in Online Courses

For Q5, the percentages of general agreement among the students of both departments are almost similar (almost 57% for BF students versus almost 64% for T students); however, BF students are much more disagreeing in compare to T students.

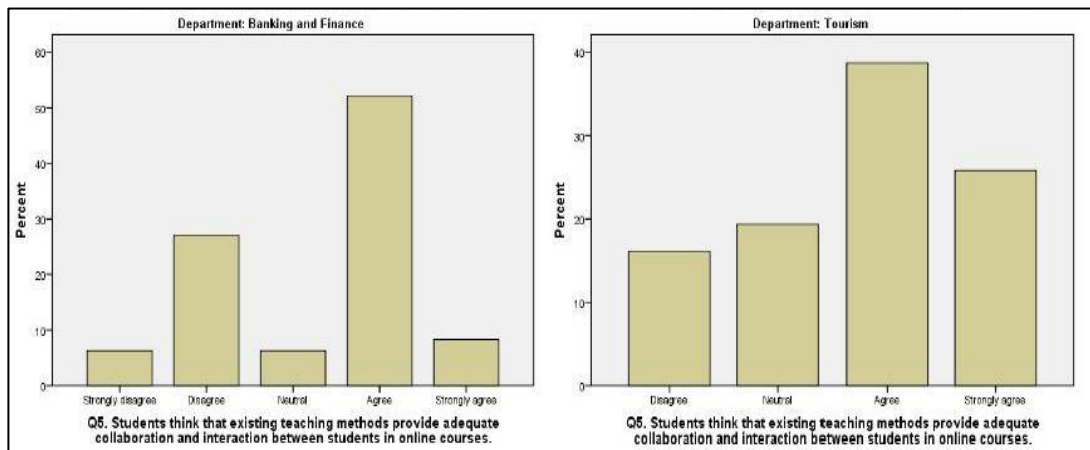


Figure5: Q5.Students think that existing Teaching Methods provide Adequate Collaboration and Interaction between Students in Online Courses

For Q6, the distributions of answers are almost similar for both departments' students.

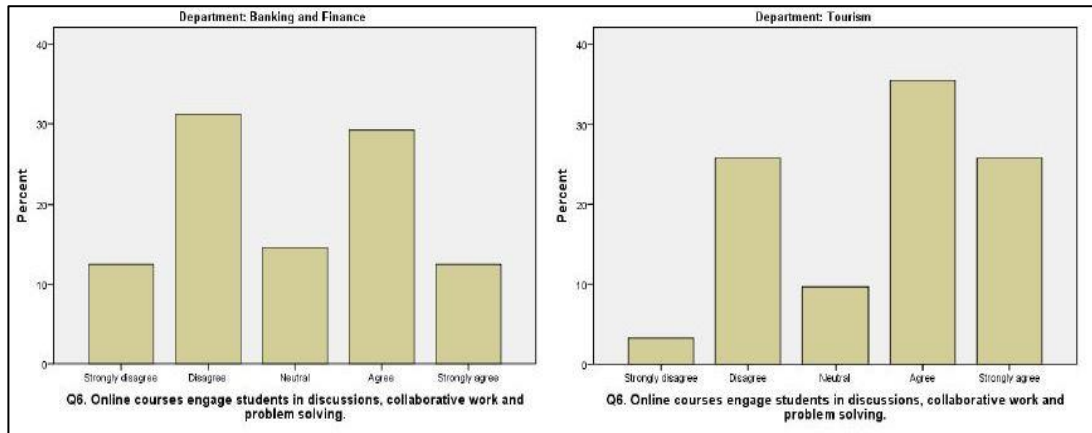


Figure6: Q6. Online Courses engage Students in Discussions, Collaborative Work and Problem Solving

For Q7, the distributions of answers are almost similar for both departments' students.

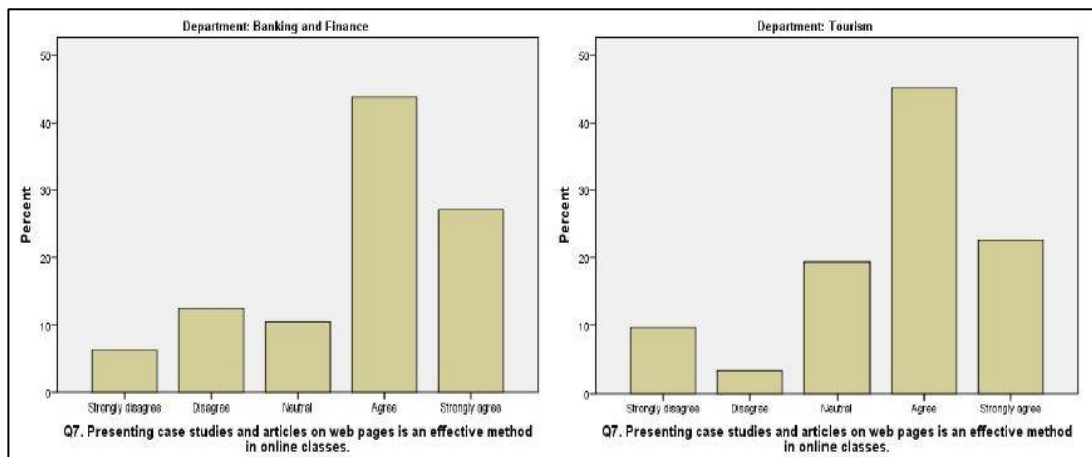


Figure7: Q7. Presenting Case Studies and Articles on Web Pages is an Effective Method in Online Classes

For Q8, the distributions of answers are generally similar for both departments' students; however, the percentage of general disagreement is higher in BF students.

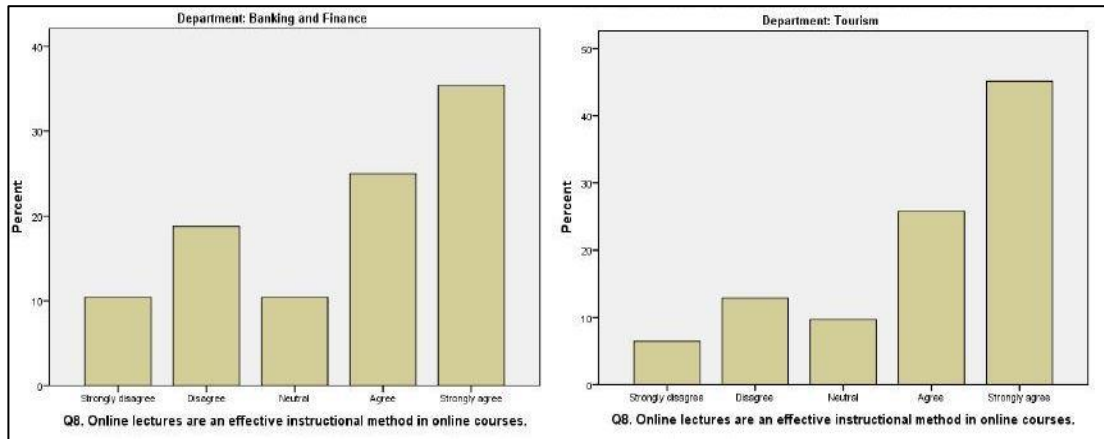


Figure8: Q8. Online lectures are an Effective Instructional Method in Online Courses

For Q9, the distributions of answers are similar.

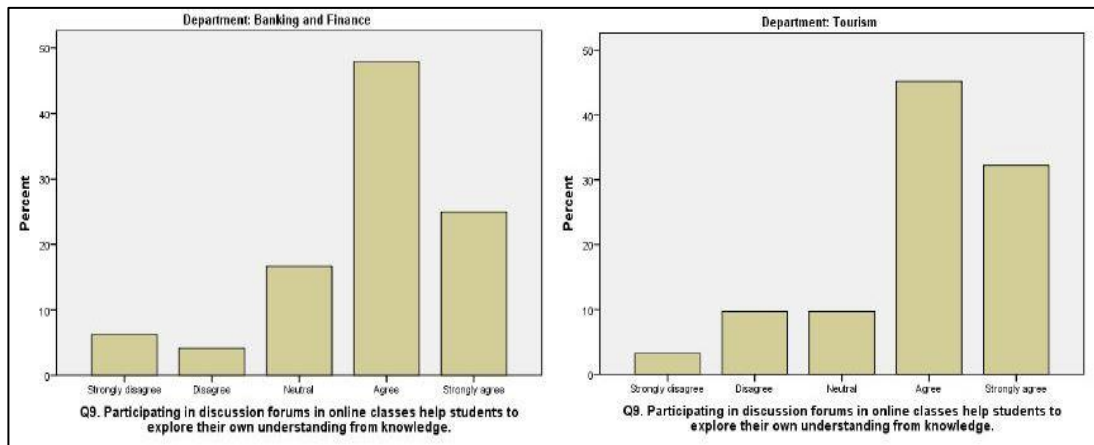


Figure9: Q9. Participating in Discussion Forums in Online Classes helps Students to explore Their Own Understanding from Knowledge

For Q10, the distributions of answers are almost similar; however, T students are more agreeing.

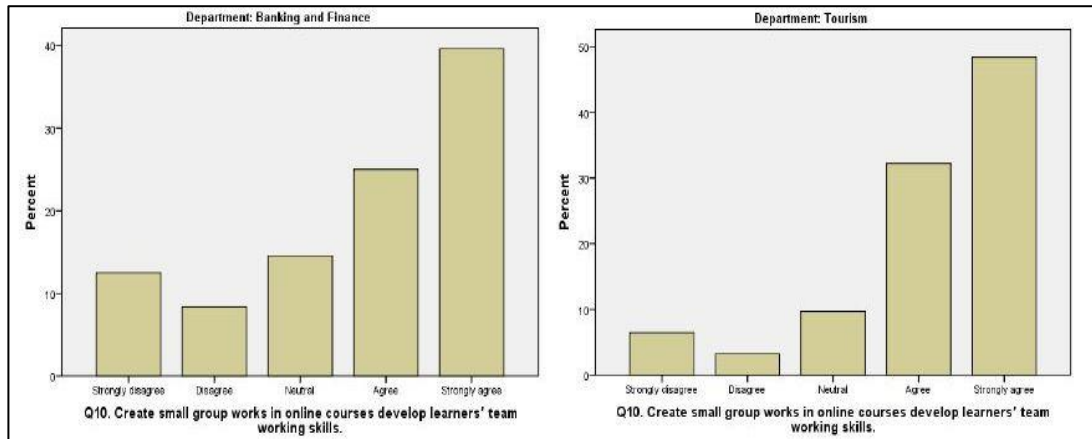


Figure10: Q10.Create Small Group Works in Online Courses Develop Learners’ Team Working Skills

For Q11, general disagreement among BF students is much higher (almost 20% versus almost 6%) than T students.

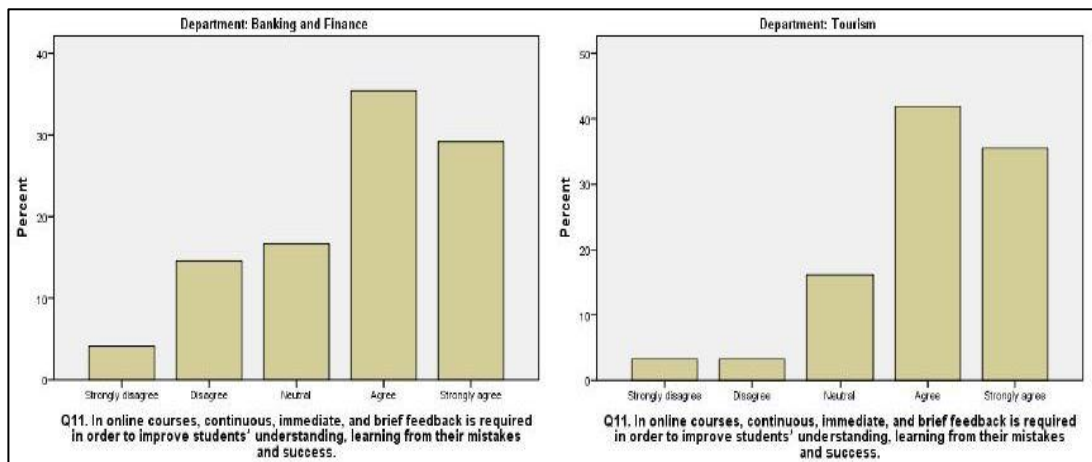


Figure11: Q11.In Online Courses, Continuous, Immediate and Brief Feedback are required in order to improve Students’ understanding, learning from Their Mistakes and Success

For Q12, the general agreement among BF students is almost 5% more than T students. In terms of general disagreement both groups have similar opinions.

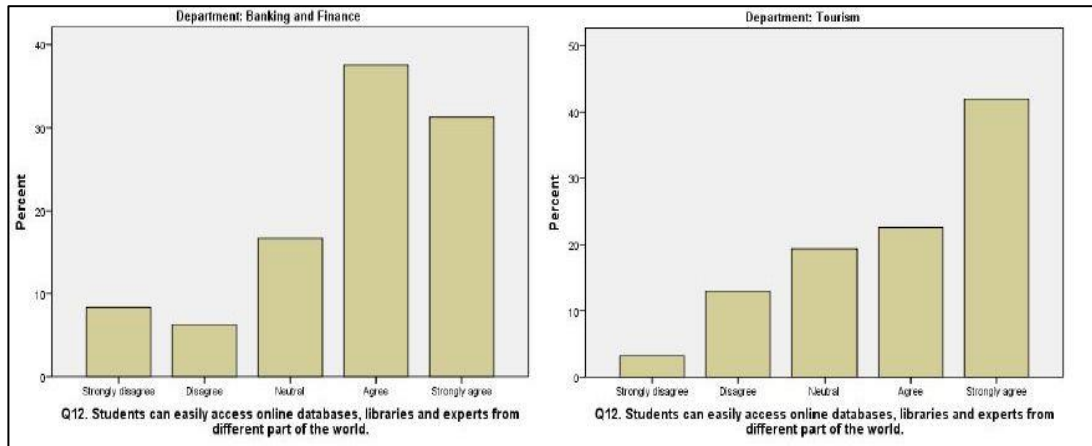


Figure12: Q12.Students have access to a Variety of Resources such as Online Databases, Experts, and Libraries from anywhere

For Q13, there is no general disagreement among T students but almost 15% of BF students disagree with the question.

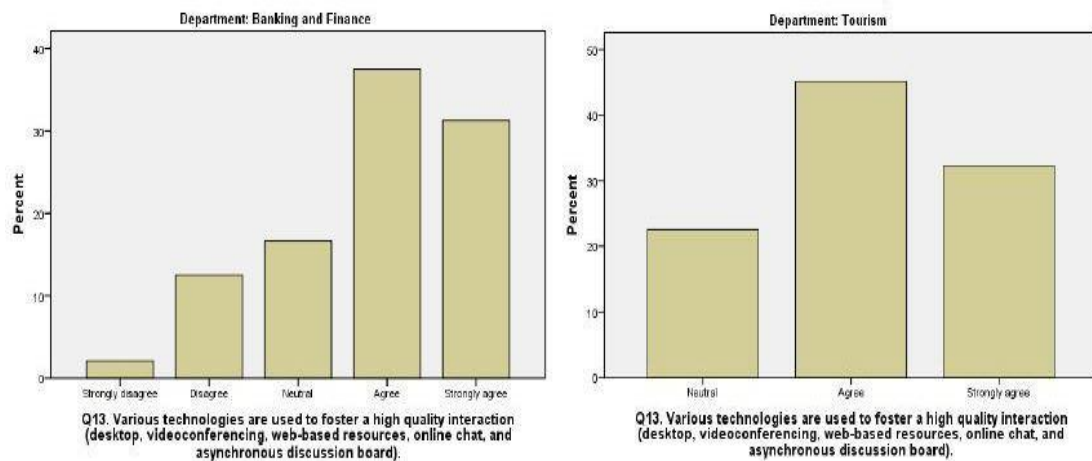


Figure13: Q13.Using Appropriate Tools and Technologies can enhance the Quality of Interaction in Online Classes

For Q14, almost 20% of BF students disagree versus almost 10% of T students do so.

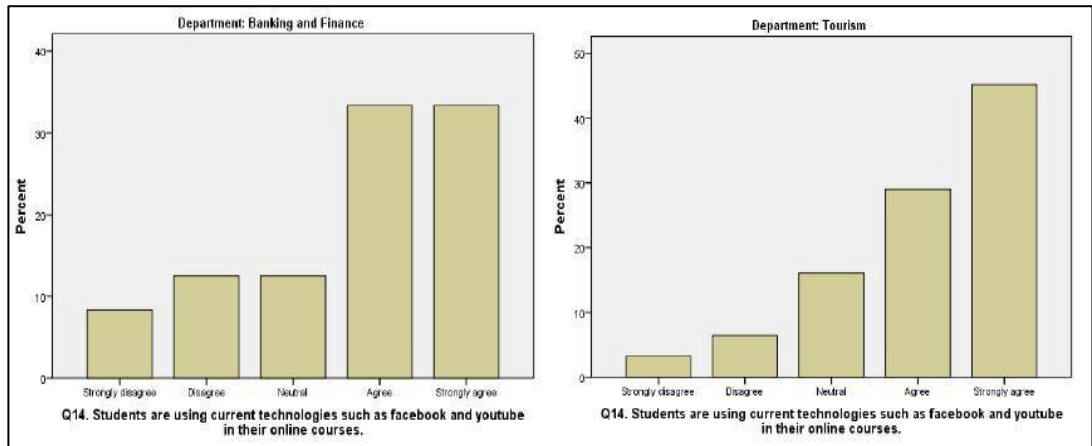


Figure14: Q14.Students are using Current Technologies such as Facebook and YouTube in Their Online Courses

For Q15, there is no disagreement among T students; however, almost 15% of BF students disagree.

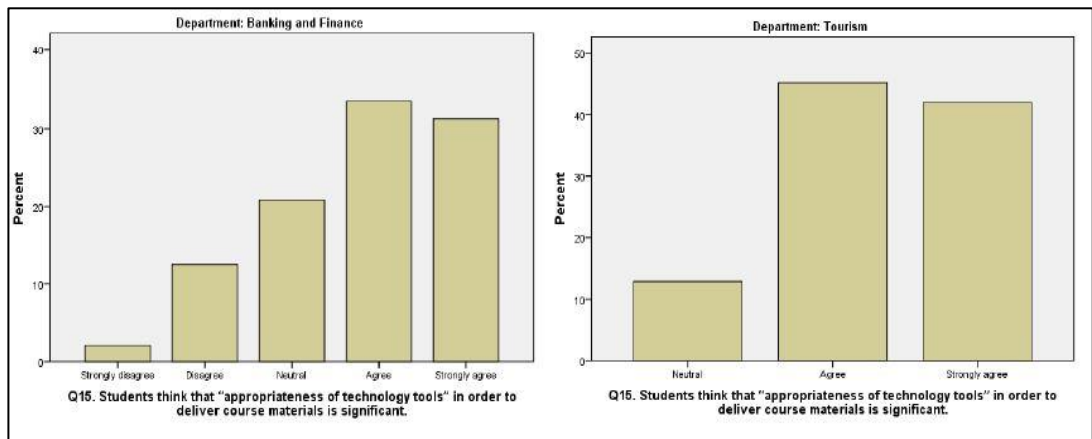


Figure15: Q15.Students think that “Appropriateness of Technology Tools” in order to deliver Course Materials is Significant

For Q16, the distributions of answers are generally similar in both groups.



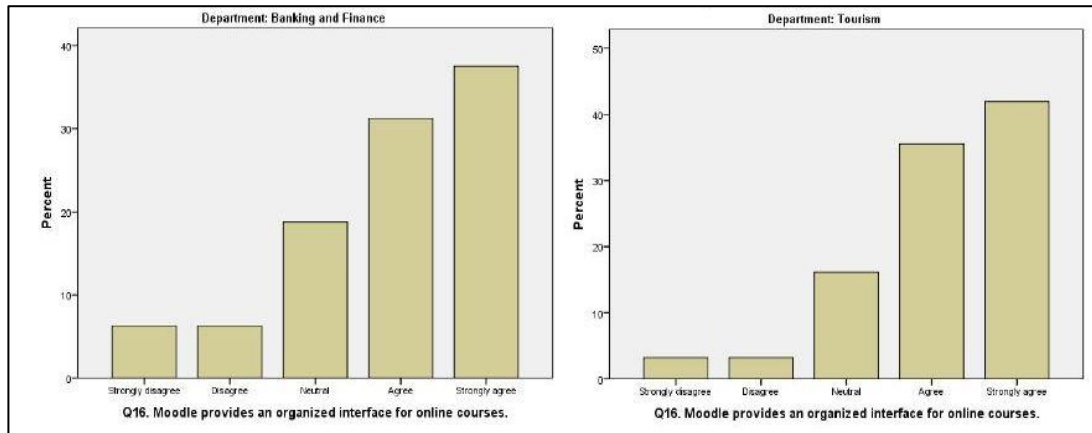


Figure16: Q16.Moodle provides an Organized Interface for Online Courses

For Q17, 30% of T students are neutral to the questions versus 15% of BF students; however, disagreement among T students is less than 5% whereas below 20% of BF students disagree.

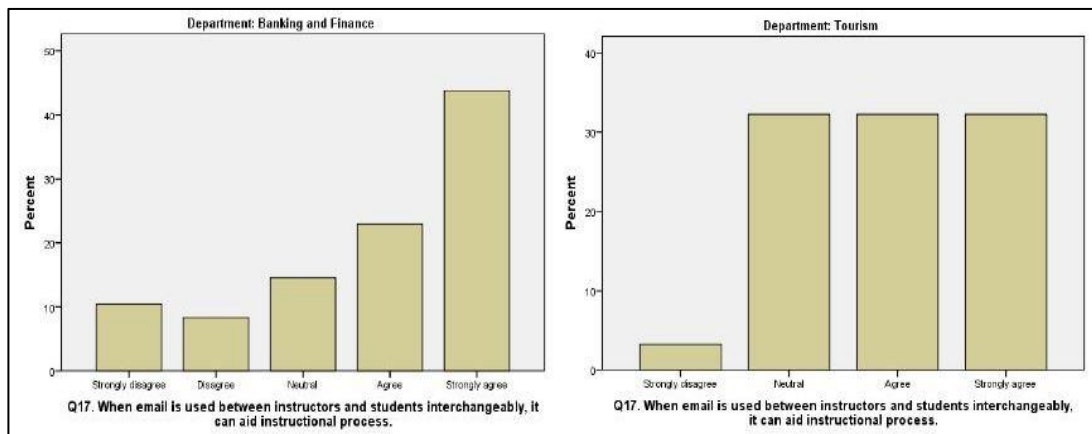


Figure17: Q17.When Email is used between Instructors and Students Interchangeably, It can aid Instructional Process

For Q18, the distributions of answers are generally similar among both groups.

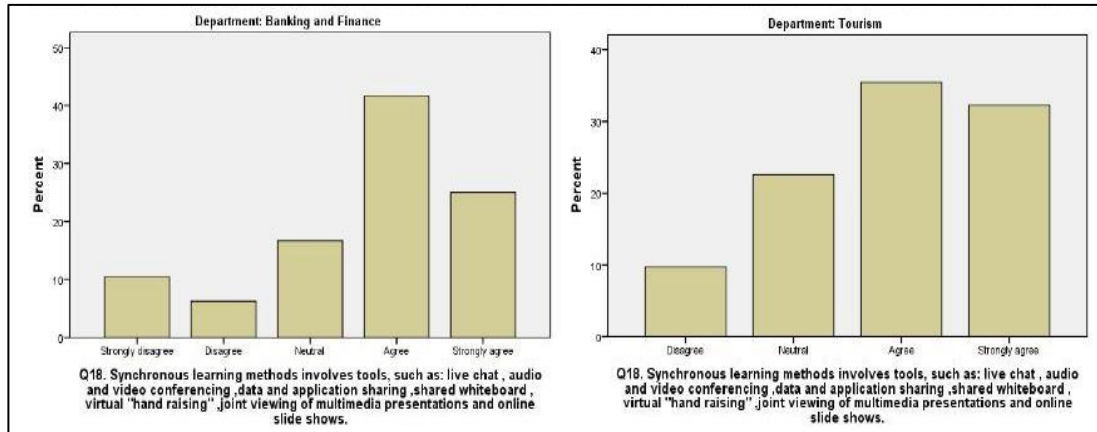


Figure18: Q18.Synchronous Learning Methods involves Different New Communication Tools

For Q19, the general agreement among BF students slightly higher than T students; however, the disagreement is much higher among BF students.

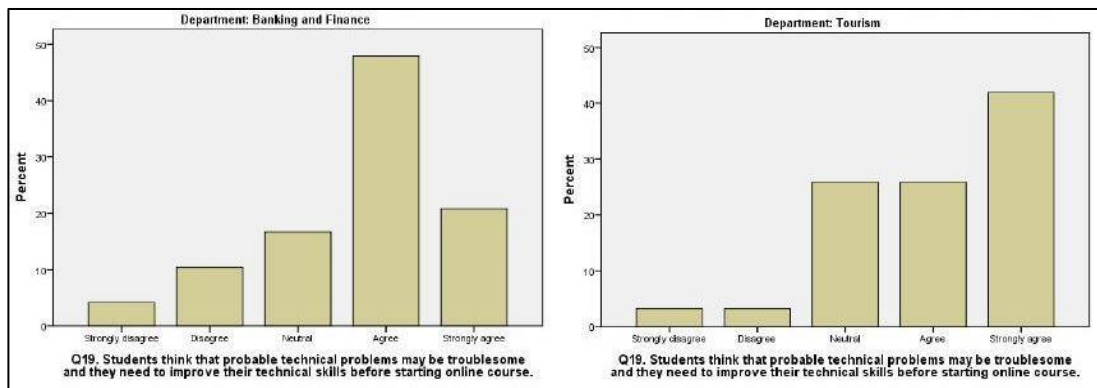


Figure19: Q19.Students think that Probable Technical Problems may be Troublesome and they need to improve Their Technical Skills before starting Online Course

For Q20, there is no disagreement among T students whereas 15% of BF students disagree with the question.

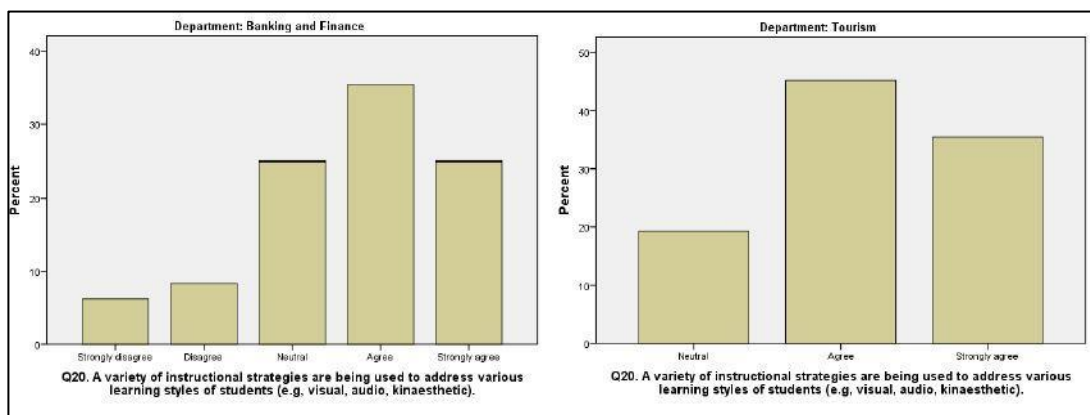


Figure20: Q20.Different Learning Styles of Students have been supported by using a Variety of Instructional Strategies

#### 4.4 Correlation

Table 3 depicts the correlation matrix between each pair of questions. The majority of correlations are positive and none of negative ones are less than -0.14 (the minimum correlation is -0.138) denoting that the corresponding answers are uncorrelated. There is no correlation more than 0.50 so the positive correlations are not strong but in Table 3 we highlight the four highest values that are 0.492, 0.491, 0.487, and 0.482 which are corresponded to {Q8, Q19}, {Q8, Q9}, {Q13, Q18}, and {Q13, Q20} respectively, showing partial correlations between the mentioned pairs. Table 4 summarizes the top 4 partial correlated questions with regard to the students' answers.

Table 2: Correlation matrix of 20 questions

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19
Q2	.323																		
Q3	.254	.148																	
Q4	.238	.037	.051																
Q5	.337	.083	.357	.363															
Q6	.387	.086	.285	.335	.424														
Q7	.09	-.045	-.077	.118	.165	.254													
Q8	.232	.147	.349	.299	.403	.341	.4												
Q9	.157	-.022	.19	.128	.218	.209	.382	.491											
Q10	.256	-.005	.195	.241	.311	.327	.26	.469	.374										
Q11	.328	.012	.359	.29	.219	.295	-.008	.314	.288	.242									
Q12	.144	-.028	.238	.227	.163	.067	.006	.292	.302	.074	.354								
Q13	.192	-.138	.154	.146	.182	.228	.052	.247	.267	.458	.279	.233							
Q14	.054	.092	.142	.106	.081	.044	-.103	-.089	-.096	.076	.257	.138	.166						
Q15	.142	.031	.201	.112	.379	.175	-.003	.112	.035	-.051	.128	.118	.229	.352					
Q16	.263	.134	.232	.169	.138	.238	.08	.219	.104	.25	.35	.158	.212	.269	.105				
Q17	.207	.121	.239	.201	.156	.11	.212	.286	.231	.148	.229	.357	.192	.088	.213	.326			
Q18	.213	-.053	.265	.332	.316	.211	.147	.402	.396	.407	.375	.462	.487	.12	.055	.417	.314		
Q19	.247	.018	.134	.274	.363	.14	.227	.492	.229	.352	.194	.256	.302	.257	.208	.342	.338	.462	
Q20	.212	.029	.22	.239	.353	.218	-.005	.358	.216	.375	.261	.32	.482	.135	.189	.331	.35	.417	.282

Table 3: Top 4 Partial Correlated Questions

Question Pairs	Correlation Value	Questions
{Q8, Q19}	0.492	Q8: Online lectures are an effective instructional method in online courses.  Q19: Students think that probable technical problems may be troublesome and they need to improve their technical skills before starting online course
{Q8, Q9}	0.491	Q8: Online lectures are an effective instructional method in online courses.  Q9: Participating in discussion forums in online classes help students to explore their own understanding from knowledge.
{Q13, Q18}	0.487	Q13: Using appropriate tools and technologies can enhance the quality of interaction in online classes.  Q18.Synchronous learning methods involves different new communication tools.
{Q13, Q20}	0.482	Q13: Using different appropriate tools and technologies can enhance the quality of interaction in online classes.  Q20: Different learning styles of students have been supported by using a variety of instructional strategies.

## 4.5 Frequency tables

Table 4: Q1. Students think that the Instructional Methods that Instructors use in Their Online Courses are the same in Virtual Environment and Traditional Classes.

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	5	10.4	10.4	10.4
		Disagree	12	25.0	25.0	35.4
		Neutral	6	12.5	12.5	47.9
		Agree	24	50.0	50.0	97.9
		Strongly agree	1	2.1	2.1	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	1	3.2	3.2	6.5
		Neutral	5	16.1	16.1	22.6
		Agree	18	58.1	58.1	80.7
		Strongly agree	6	19.4	19.4	100.0
		Total	31	100.0	100.0	

Table 5: Q2.Instructors are using the Latest Instructional Methods in Online Courses.

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	2	4.2	4.2	4.2
		Disagree	11	22.9	22.9	27.1
		Neutral	4	8.3	8.3	35.4
		Agree	27	56.3	56.3	91.7
		Strongly agree	4	8.3	8.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	5	16.1	16.1	19.4

	Neutral	2	6.5	6.5	25.8
	Agree	16	51.6	51.6	77.4
	Strongly agree	7	22.6	22.6	100.0
	Total	31	100.0	100.0	

Table 6: Q3.Online Classes can be implemented in Both Forms of Synchronous and Asynchronous Communication

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	2	4.2	4.2	4.2
		Disagree	4	8.3	8.3	12.5
		Neutral	11	22.9	22.9	35.4
		Agree	22	45.8	45.8	81.3
		Strongly agree	9	18.8	18.8	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Disagree	2	6.5	6.5	6.5
		Neutral	3	9.7	9.7	16.1
		Agree	16	51.6	51.6	67.7
		Strongly agree	10	32.3	32.3	100.0
		Total	31	100.0	100.0	

Table 7: Q4.Existing Teaching Methods are Student-Centered and engage Students in Learning Activities in Online Courses

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	4	8.3	8.3	8.3
		Disagree	10	20.8	20.8	29.2
		Neutral	6	12.5	12.5	41.7
		Agree	22	45.8	45.8	87.5
		Strongly agree	6	12.5	12.5	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Disagree	7	22.6	22.6	22.6
		Neutral	2	6.5	6.5	29.0
		Agree	19	61.3	61.3	90.3
		Strongly agree	3	9.7	9.7	100.0
		Total	31	100.0	100.0	

Table 8: Q5.Students think that Existing Teaching Methods provide Adequate Collaboration and Interaction between Students in Online Courses

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	3	6.3	6.3	6.3
		Disagree	13	27.1	27.1	33.3
		Neutral	3	6.3	6.3	39.6
		Agree	25	52.1	52.1	91.7
		Strongly agree	64	8.3	8.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Disagree	5	16.1	16.1	16.1
		Neutral	6	19.4	19.4	35.5
		Agree	12	38.7	38.7	74.2
		Strongly agree	8	25.8	25.8	100.0
		Total	31	100.0	100.0	

Table 9: Q6.Online Courses engage Students in Discussions, Collaborative Work and Problem Solving

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	6	12.5	12.5	12.5
		Disagree	15	31.3	31.3	43.8
		Neutral	7	14.6	12.6	58.3
		Agree	14	29.2	29.2	87.5
		Strongly agree	6	12.5	12.5	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	8	25.8	25.8	29.0
		Neutral	3	9.7	9.7	38.7
		Agree	11	35.5	35.5	74.2
		Strongly agree	8	25.8	25.8	100.0
		Total	31	100.0	100.0	

Table 10: Q7.Presenting Case Studies and Articles on Web Pages is an Effective Method in Online Classes

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	3	6.3	6.3	6.3
		Disagree	6	12.5	12.5	18.8
		Neutral	5	10.4	10.4	29.2
		Agree	21	43.8	43.8	72.9
		Strongly agree	13	27.1	27.1	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	3	9.7	9.7	9.7
		Disagree	1	3.2	3.2	12.9
		Neutral	6	19.4	19.4	32.3
		Agree	14	45.2	45.2	77.4
		Strongly agree	7	22.6	22.6	100.0
		Total	31	100.0	100.0	

Table 11: Q8.Online Lectures are an Effective Instructional Method in Online Courses

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	5	10.4	10.4	10.4
		Disagree	9	18.8	18.8	29.2
		Neutral	5	10.4	10.4	39.6
		Agree	12	25.0	25.0	64.6
		Strongly agree	17	35.4	35.4	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	2	6.5	6.5	6.5
		Disagree	4	12.9	12.9	19.4
		Neutral	3	9.7	9.7	29.0
		Agree	8	25.8	25.8	54.8
		Strongly agree	14	45.2	45.2	100.0
		Total	31	100.0	100.0	

Table 12: Q9.Participating in Discussion Forums in Online Classes helps Students to explore their own understanding from Knowledge

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	3	6.3	6.3	6.3
		Disagree	2	4.2	4.2	1.4
		Neutral	8	16.7	16.7	27.1
		Agree	23	47.9	47.9	75.0
		Strongly agree	12	25.0	25.0	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	3	9.7	9.7	12.9
		Neutral	3	9.7	9.7	22.6
		Agree	14	45.2	45.2	67.7
		Strongly agree	10	32.3	32.3	100.0
		Total	31	100.0	100.0	

Table 13: Q10.Create Small Group Works in Online Courses develop Learners' Team Working Skills

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	6	12.5	12.5	12.5
		Disagree	4	8.3	8.3	2.8
		Neutral	7	14.6	14.6	35.4
		Agree	12	25.0	25.0	60.4
		Strongly agree	19	39.6	39.6	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	2	6.5	6.5	6.5
		Disagree	1	3.2	3.2	9.7
		Neutral	3	9.7	9.7	19.4
		Agree	10	32.3	32.3	51.6
		Strongly agree	15	48.4	48.4	100.0
		Total	31	100.0	100.0	

Table 14: Q11.In Online Courses, Continuous, Immediate and Brief Feedback are required in order to improve Students' understanding, learning from their Mistakes and Success

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	2	4.2	4.2	4.2
		Disagree	7	14.6	14.6	18.8
		Neutral	8	16.7	16.7	35.4
		Agree	17	35.4	35.4	70.8
		Strongly agree	14	29.2	29.2	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	1	3.2	3.2	6.5
		Neutral	5	16.1	16.1	22.6
		Agree	13	41.9	41.9	64.5
		Strongly agree	11	35.5	35.5	100.0
		Total	31	100.0	100.0	



Table 15: Q12.Students have access to a Variety of Resources such as Online Databases, Experts, and Libraries from anywhere

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	4	8.3	8.3	8.3
		Disagree	3	6.3	6.3	14.6
		Neutral	8	16.7	16.7	31.3
		Agree	18	37.5	37.5	68.8
		Strongly agree	15	31.3	31.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	4	12.9	12.9	16.1
		Neutral	6	19.4	19.4	35.5
		Agree	7	22.6	22.6	58.1
		Strongly agree	13	41.9	41.9	100.0
		Total	31	100.0	100.0	

Table 16: Q13.Using Appropriate Tools and Technologies can enhance the Quality of Interaction in Online Classes

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	1	2.1	2.1	2.1
		Disagree	6	12.5	12.5	14.6
		Neutral	8	16.7	16.7	31.3
		Agree	18	37.5	37.5	68.8
		Strongly agree	15	31.3	31.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Neutral	7	22.6	22.6	22.6
		Agree	14	45.2	45.2	67.7
		Strongly agree	10	32.3	32.3	100.0
		Total	31	100.0	100.0	

Table 17: Q14.Students are using Current Technologies such as Facebook and YouTube in their Online Courses

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	4	8.3	8.3	8.3
		Disagree	6	12.5	12.5	2.8
		Neutral	6	12.5	12.5	33.3
		Agree	16	33.3	33.3	66.7
		Strongly agree	16	33.3	33.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	2	6.5	6.5	9.7
		Neutral	5	16.1	16.1	25.8
		Agree	9	29.0	29.0	54.8
		Strongly agree	14	45.2	45.2	100.0
		Total	31	100.0	100.0	

Table 18: Q15.Students think that “Appropriateness of Technology Tools” in order to deliver Course Materials is Significant

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	1	2.1	2.1	2.1

		Disagree	6	12.5	12.5	14.6
		Neutral	10	20.8	20.8	35.4
		Agree	16	33.3	33.3	68.8
		Strongly agree	15	31.3	31.3	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Neutral	4	12.9	12.9	12.9
		Agree	14	45.2	45.2	58.1
		Strongly agree	13	41.9	41.9	100.0
		Total	31	100.0	100.0	

Table 19: Q16.Moodle provides an Organized Interface for Online Courses

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	3	6.3	6.3	6.3
		Disagree	3	6.3	6.3	12.5
		Neutral	9	18.8	18.8	31.3
		Agree	15	31.3	31.3	62.5
		Strongly agree	18	37.5	37.5	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	1	3.2	3.2	6.5
		Neutral	5	16.1	16.1	22.6
		Agree	11	35.5	35.5	58.1
		Strongly agree	13	41.9	41.9	100.0
		Total	31	100.0	100.0	

Table 20: Q17.When Email is used between Instructors and Students Interchangeably, it can aid Instructional Process

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	5	10.4	10.4	10.4
		Disagree	4	8.3	8.3	18.8
		Neutral	7	14.6	14.6	33.3
		Agree	11	22.9	22.9	56.3
		Strongly agree	21	43.8	43.8	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Neutral	10	32.3	32.3	35.5
		Agree	10	32.3	32.3	67.7
		Strongly agree	10	32.3	32.3	100.0
		Total	31	100.0	100.0	

Table 21: Q18.Synchronous Learning Methods Involves Different New Communication Tools

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	5	10.4	10.4	10.4
		Disagree	3	6.3	6.3	16.7
		Neutral	8	16.7	16.7	33.3
		Agree	20	41.7	41.7	75.0
		Strongly agree	12	25.0	25.0	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Disagree	3	9.7	9.7	9.7
		Neutral	7	22.6	22.6	32.3

	Agree	11	35.5	35.5	67.7
	Strongly agree	10	32.3	32.3	100.0
	Total	31	100.0	100.0	

Table 22: Q19.Students Think that Probable Technical Problems may be Troublesome and they Need to Improve their Technical Skills before Starting Online Course

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	2	4.2	4.2	4.2
		Disagree	5	10.4	10.4	14.6
		Neutral	8	16.7	16.7	31.3
		Agree	23	47.9	47.9	79.2
		Strongly agree	10	20.8	20.8	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Strongly disagree	1	3.2	3.2	3.2
		Disagree	1	3.2	3.2	6.5
		Neutral	8	25.8	25.8	32.3
		Agree	8	25.8	25.8	58.1
		Strongly agree	13	41.9	41.9	100.0
		Total	31	100.0	100.0	

Table 23: Q20. Different Learning Styles of Students have been Supported by Using a Variety of Instructional Strategies

			Frequency	Percent	Valid Percent	Cumulative Percent
<b>Banking and Finance</b>	<b>Valid</b>	Strongly disagree	3	6.3	6.3	6.3
		Disagree	4	8.3	8.3	14.6
		Neutral	12	25.0	25.0	39.6
		Agree	17	35.4	35.4	75.0
		Strongly agree	12	25.0	25.0	100.0
		Total	48	100.0	100.0	
<b>Tourism</b>	<b>Valid</b>	Neutral	6	19.4	19.4	19.4
		Agree	14	45.2	45.2	64.5
		Strongly agree	11	35.5	35.5	100.0
		Total	31	100.0	100.0	

#### 4.6 Comparison between the Statistical Data Analysis of Department of B&F and Faculty of TH&M

In terms of instructional methods, more than half of the students from both departments agreed that instructors can use similar methods in online classes and traditional classes. Whereas 35.4% of students from Department of B&F and 6.4% of students from Faculty of TH&M claimed that instructors might use different teaching

methods in online classes and regular classes. According to the statistical data analysis, it can be said that students believe that a variety of instructional methods such as presenting case studies and articles on web pages, online lecturing, using discussion forms and creating small group works can be utilized in online classes by instructors.

Another significant issue that can be considered is the interaction and collaboration between students in online classes. Results from both departments indicate that more than 60.4% of students from Department of B&F and 64.5% from Faculty of TH&M believe that existing instructional methods create adequate collaboration and interaction between students. On the contrary, 43.8% of students from Department of B&F and 29% from Faculty of TH&M reported that online courses don't engage students in discussions, collaborative work and problem solving.

Finally, with regard to the various technology tools for online environment, statistical results show that most of the students from both departments believe that appropriateness of technology tools in online classes is very significant.

#### **4.7 Qualitative Results**

Researcher had carried out semi-structured interviews with 8 instructors who had experience on online teaching in their academic career from both Department of B&F and Faculty of TH&M. The teachers' use of instructional methods which is gathered through semi-structured interviews will be analysed and presented in this chapter.

#### **4.7.1 Instructors Interview Analysis**

Instructors were asked 7 questions about different aspects of the online teaching methods which are used in existing online classes in Department of B&F and Faculty of Faculty of TH&M in Eastern Mediterranean University. The questions were about online teaching methods, utilized tools and techniques, advantages and disadvantages of this type of instruction, interaction and collaboration between students and also the method of evaluation in online classes. Most of the instructors claimed that the system of online programs has not been really established in the university and the number of demands for online courses especially during the last years decreased. Moreover, Instructors believed that the existing online system in the university is not actually interactive. For instance T2 said:

Current structure over online programs is not online actually and I would categorize it as distance learning and it's not really interactive online program.

As well as T4 said:

These online classes are a type of self-study over the courses and you need to guide the students very well.

Additionally, existing problems and limitations such as the lack of sophisticated tools and techniques don't let instructors apply latest type of teaching methods in online classes. For example T2 said:

Basically, our communication material is email. There are not many other modules available and unfortunately we have not applied those types of methods to our online classes which we use in our normal classes.

Regarding the application of teachers' teaching methods in online classes, it can be said that altogether instructors are using the lecturing method for online courses in both departments. In this way that instructors prepare the instructional materials and

then send them to the students. Students are expected to download and read the materials and do the assignments. For example, T1 expressed that:

We email all the materials to those students who registered in the online classes including the copyrighted textbooks, course outline, power points, the questions that they have to solve and also the solution of those questions. Students have to follow the course outline till the midterm. For midterm exam they assign to do some cases and assignments which they supposed to do and then they submit their work and we grade them.

Lecturing method which means transferring information from teachers to students is not ideal form of instruction for online classes. According to Partlow and Gibbs (2003) online instructors should not deliver instructional materials to students, rather students must actively find materials. In addition, Partlow and Gibbs (2003) noted that teaching is a “process of helping learners construct or create their own meaning by providing them with authentic learning experiences and guiding them through the meaning-making process”. However, collected data represents misuse of the effective teaching methods for online classes. Likewise, T4 said:

Each week I put updated information on the module system. In this system I write in details what are the expectations of the assignments that I expect. In order to follow the lectures, I asked Students to prepare some assignments. These assignments are combination of reading materials and then searching related up-to-date information. Students are expected to read the concepts, understand the concepts and find some examples and prepare a report of assignment to submit.

Instructors were asked a question about the tools and technologies that should be used in online classes. It can be said that, overall teachers believed that nowadays there are plenty of tools and technologies for online environments and they can use various tools and technologies such as Module, online instructional website, Email, Skype, phone and other existing tools in both departments. However, they said that many tools and technologies have not been established in our university. For instance, T2 said that:

There is a website for online courses which include everything students need such as: downloading e-books, the course outlines, the list of selected chapters, the quizzes and problem questions, the power points, the chapters and assignments and the multiple choice questions. But the interaction between the students and lectures just by using this website has been kept minimum. Previously the institute tried to take the video tape recording of the lecture which I have done to put on the website but it did not materialize.

Similarly, T5 said that:

There are some specific technologies and ways that we can actually conduct online teaching just like you do it normally. The equipment is available and we had a workshop to apply those technologies but somehow it didn't materialize and it has been interrupted while definitely those technologies are essential to achieve a quality online teaching.

On the other hand, some of instructors said that sometimes they are using interactive tools such as Skype. For instance, T3 said:

Skype is the main tool for online classes and now we are using Skype in our classes plus if students need some more explanation related with the lecture we use recorder to record voice and then send it to them. Actually 70% of our communications with the students are through the module system and sometimes these communications are on the phone as well.

Overall it can be said that some instructors can and some can't use the current technologies in their classes due to the lack of strong supervision and infrastructure for online courses.

In online learning environment the level of interaction between student-student and teacher-student in the classroom play an important role. Overall instructors explained that using appropriate communication tools such as Skype, Facebook, YouTube, and discussion board strongly have an effect on the interaction in the classroom environment. For instance, T6 expressed that:

The best way to achieve interaction and collaboration between students in online classes is to apply applicable technologies and methodologies in teaching. Otherwise interaction is not high in classrooms.

In terms of interaction between students, T4 said that:

If students don't know each other, they cannot come together. Otherwise if they know each other they collaborate on the assignments, come together and discuss physically sometimes.

Nevertheless because of the existing problems such as the lack of a strong supervision in online programs, some of instructors don't use existing communication tools in their online classes and it minimizes the interaction.

In addition, one of instructors believed that the type of teachers teaching method, assignment and project can affect the level of interaction in an online class. T3 said that:

We are trying to use new technologies and also keep students up busy with more home works such as case studies, Research questions, writing summary, writing an essay on a topic and reading and summarizing articles and this means interaction.

Regarding monitoring of learners' activities in online classes, instructors expressed that basically they can monitor students' activities through homework and assignments. Furthermore, they mentioned that the current tools and technologies such as monitoring software, using existing website to check for plagiarism and Skype can be effective tools. For example, T3 expressed that:

We read students' response and we can easily detect if the students read the materials or not. Also we put their answers into Turnitin website for checking plagiarism.

Likewise, T4 said that:

Using some tools such as Module for sending assignment with limited time for doing to students regularly and then checking their activities constantly in the module can be effective for monitoring students' activities.



What is more, T6 emphasized that the type of assignments and projects which are assigned for courses can help instructors to have a careful monitoring of students' activities. T6 said that:

Don't ask definition and don't give multiple choice questions to students. If instructors give them creative task, they will do it by themselves for sure.

Basically, evaluation for online courses is based on students' results. Four out of seven instructors underlined that the process of assessment in online classes should be done through different type of project and assignment. For instance, T3 expressed that:

I evaluate students through their works. For example, if I give 5 or 6 assignments to students in my regular classes, I would give them 10 or 12 different assignments such as summarizing reports and articles, writing an essay on a topic and summarizing a chapter of a book. I'm trying to at least give students various types of works.

Moreover, two instructors strongly emphasized that the evaluation should be done during the whole semester from the beginning till the end which is known as on-going evaluation. For example, T4 explained that:

I strongly believed that if we wait until the end of semester, students will be lost. In addition to the final exam we have case study, term project, discussion questions which are 60% of the course grade. Students need to work and submit these assignments until the final exam.

Likewise, T6 said that:

Frequent evaluation encourage students without make them board.

According to the perceptions of the instructors, the advantages of online learning can be listed as: Less cost and time benefit, the opportunity of the disabled and working people to attend classes without being physically in the class, flexibility of the

students from all around the world for choosing the suitable place and time for themselves to work. For instance, T4 said that:

Students can attend to this type of course from anywhere in the world. They don't need to travel and it provides many time and cost benefit.

Furthermore, regarding the teaching methods instructors believed that the advantages of online classes are: carrying out the lectures easier, delivering information through different tools and techniques and having access to the majority of use of resources.

For example, T4 said that:

I like online classes because they are really comfortable. I can do my lectures from my office or my home. It is the flexibility of communication with students. I don't have to cancel my online courses when I'm in a conference. I can communicate with students anywhere and anytime.

Regarding the disadvantages three instructors claimed that online teaching and learning can be time consuming for both the teachers and students. For instance, T4 said that:

Students in online classes need to provide much more effort to learn compare to regular classes.

To support T4's argument T2 said that:

It is very time consuming for teachers in terms of arranging online lectures, exams, and specific time for each student and also in terms of administrative and grading management.

Moreover, as a disadvantage three out of seven instructors said that they need close contact to students in order to monitor their activity as sometimes they find difficult to communicate with students. For example, T3 said that:

We need more close contact with students in online classes because we have to keep students up continuously and we have to make sure that they are participating.

Furthermore, Instructors gave researcher some suggestions in order to have more effective teaching methods in online courses. In terms of tools and technologies, the most of them emphasized that applying developed communication tools and programs are very significant because they believe that communication is the main key for the application of high quality online courses. For example, T1 expressed that:

To establish some type of communication through Skype and video conferencing can help us to force students to study and to learn and to be able to present because presentation is very important for education.

In terms of teachers teaching methods three out of seven instructors strongly underlined that instructors should apply teaching methods which increase the level of interaction in classes. T2 expressed that:

Providing opportunity for more interaction and constant communication between students and teachers, recorded version of lectures or live session from the classes that have been taught for regular students in the campus can be effective for online classes. Furthermore, it would be much better to give students constantly more interactive exercises such as interactive multiple questions instead of reading and summarizing assignments and also lead students to do group assignments.

To support the T2 argument, T6 said that:

Frequent interaction and evaluation is very important because the benefit of online education is our ability to make it flexible. We can increase the number of evaluation and the amount of interaction with students by dividing context into very small pieces and send them to students in any time.

Finally, in terms of the existing online programs in Eastern Mediterranean University, all of the instructors from the Department of B&F and Faculty of TH&M emphasized that first of all university need to collaborate with other universities and organizations in order to use their experiences in online teaching to build the infrastructure for online programs. According to the research findings, having gone through in-service training programs on the use of online tools and technologies the

in-service trainings can improve teachers in online courses. Moreover, instructors had different ideas about the existing rules in online learning. For example, while one of the teachers' T2 said that:

According to the regulations of the higher education console of Turkey, for online courses, final exam has to be done on campus in order to prevent cheating. It is clear that in online courses, everything must be done through online. Therefore, such rules make a lot of troubles for teachers and students and we should improve these restricted rules.

On the contrary T3 said that:

We should have students at least for the final exam with us because we are only seeing them through internet. It's online course but for final exam it would be ok to have students in the campus.

## **Chapter 5**

### **CONCLUSION**

In order to optimize online learning outcomes in EMU, according to the results gathered from this research it can be suggested that using reflective practice in online programs instead of traditional lecturing method can be more effective in teaching and learning process. Owing to these, it can be concluded as follows;

#### **5.1 Conclusion**

- Lecturing method is the main teachers' teaching method for online courses, which is the traditional method of teaching in regular classes.
- Without using appropriate communication tools and technologies, implementing effective teaching methods and techniques is not possible.
- Students think that the appropriateness of technology tools in order to deliver course materials is the most important criteria to have an effective teaching method.
- Student-centred curriculum for the online programs, using suitable communication tools and technologies in online classes, attending in-service training programs and the degree of collaboration and interaction are the major issues that should be considered in online classes.
- The lack of strong supervision and insufficient infrastructure are the two lacking issues for the online programs in EMU.

To sum up, most of teachers like (T1, T2, and T4) claimed that they couldn't implement their ideal form of teaching methods. In fact, without a fundamental infrastructure for online learning and without using appropriate tools and technologies implementation of the latest and effective teaching methods is not possible. They use the traditional teaching method which is just delivering information and assessing students based on their exams' grades.

## **5.2 Researcher's Reflection**

As it is discussed in the literature review, "reflection" is the key for effective teaching and learning cycle. Nowadays as supported by other researchers such as (Day, 1999) and (Hopkins, 1996) without reflection teachers professionally cannot improve themselves or consider themselves as "lifelong learners". OECD (1989):

Teachers are at the heart of the educational process. The greater the importance attached to education as a whole – whether for cultural transmission, for social cohesion and justice, or for human resource development so critical in modern, technology-based economies – the higher is the priority that must be accorded to the teachers responsible for that education.

Furthermore, in terms of the learning process, lecturing method as an instrument of teaching and learning is under attack from many criticisms, especially who have supported the constructivist theory of learning. It can be said that collaboration, interaction, and active involvement of students in learning substantially affect learning process while lecturing method keeps these factors in the lowest level.

Moreover, in terms of teaching method, lecturing is the traditional instructional method in which instructor conveys information to the learner without getting feedback and also without any interaction with students. Teachers need students' feedback in the learning process in order to be aware if their teaching method is

effective. They may change their teaching practice if such practices lead teaching process to the objectives of instruction that is what reflection on teaching means. But the question is how teachers can evaluate themselves and how they can be aware if changing teaching practices is necessary or not? This is why direct interaction with students in online classes likewise to regular classes is very crucial. Teachers should reflect on their teaching method not only by asking the questions but also by using the answers to these questions.

As a reflective practitioner, in order to promote and increase effectiveness online classes, “*Reflective Practice*” can be used as a teaching and learning method in educational settings such as EMU. What is more, reflective teaching method helps teachers to be aware of what they do in their classrooms.

Reflective teaching practice can be used in online programs and it enhances students-teachers’ interaction. More interaction between teachers and students helps teachers to be able to evaluate themselves if their teaching method is effective or not. In this way, teachers observe students’ activities and examine learning process during the semester. They can ask students questions and use their answers in order to change or improve their teaching methods. Consequently, teachers’ observation of learning activities, ability to ask students questions, and on-going evaluation lead teachers to have more effective teaching methods.

### **5.3 FUTURE WORK**

- This research has only been applied to two Faculties in EMU however; it can be applied to other faculties as well in order to foster online teaching-learning by using the latest technologies and teaching/learning methods.

- Considering redesigning a new model in the context of EMU the researcher by looking into both students' and teachers' perceptions of online learning suggests using "*Reflective Practice*" for online courses.
- Applying "*Reflective Practice*" enhances the quality of online programs and therefore not only in EMU but in other universities in North Cyprus.



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## **APPENDICES**

## **Appendix A: Request Letter for the Application of Research**

25.10.16


**To:** The Head of Computer and Instructional Technology Teacher Education  
Assoc.Prof.Dr.Ersun İşçioglu

**From:** Leila Mokhtari  
M.Sc Student

**Subject:** Permission for the application of research

I would like to inform you that due to my research studies I need to apply questionnaire and semi-structured interviews with students and all of the instructors at the Faculty of Tourism and Hospitality Management and Department of Banking and Finance Fall 2016. The questionnaire and semi-structured interviews are attached for your consideration. If you consider my application at your earliest convenience, I would appreciate a lot.

## Appendix B: Ethics Committee Letter for the Application of Research



**Doğu Akdeniz Üniversitesi**  
"Ülkesinin Kariyeri İçin"

**Eastern Mediterranean University**  
"For Your International Career"

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Etik Kurulu / Ethics Committee

Reference No: ETK00-2017-0009


19.01.2017

RE: Leila Mokhtari (15500207)  
Department of Computer Education and  
Instructional Technologies

To Whom It May Concern,

As part of the 2016-2017 Fall Semester, pertaining to Master Thesis questionnaires EMU's Scientific Research and Publication Ethics Committee has granted Ms. Leila Mokhtari (15500207), from the Department of Computer Education and Instructional Technologies Master Program, to pursue with her survey entitled **Redesigning a New Online Model of Teaching Method by Looking Into Students' Thinking on Teachers' Use of Instructional Methods for Online Learning at The Department of Banking and Finance and Faculty of Tourism Hospitality and Management**. This decision has been taken by the majority of votes. (Meeting number 2017/38-11)

Regards,



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

ŞT/sky.

www.emu.edu.tr

## Appendix C: Questionnaire for Students

Leila Mokhtari  
M.Sc Computer and Instructional  
Technology in Teacher Education  
05338539052  
leila.mokhtari1984@gmail.com

Dear Students,

The purpose of this questionnaire is to collect data about students' perception of the online courses at the Department of Banking and Finance and Faculty of Tourism and Hospitality Management .The purpose of research can be listed as follows:

- To reveal students' perception regarding the teaching methods which are being used by instructors in online courses.
- To assess students' needs and their preferences regarding to teaching methods such as collaborative work, problem solving and discussion in online courses.
- To reveal students' perception on educational technology tools which are used in online courses.
- To suggest a new online model of teaching method/s to instructors in order to support them to plan, deliver and make necessary changes when needed in their courses.
- To determine the pros and cons of online learning from students' perception.

As a researcher, I would appreciate if you could fill in the questionnaire, which will only take 15 minutes. This is completely confidential and will not be used for any other purpose except this research.

Leila Mokhtari  
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Technology in Teacher Education  
05338539052  
leila.mokhtari1984@gmail.com

Assist.Prof.Dr.Bengi Sonyel  
Educational Sciences  
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bengi.sonyel@emu.edu.tr

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

***Degree of agreement:***

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

<b>Students' Perceptions Regarding Online Learning and Teaching Method/s</b>						
		<b>Strongly disagree</b>	<b>disagree</b>	<b>agree</b>	<b>Strongly agree</b>	<b>Neutral</b>
1.	Students think that the instructional methods that instructors use in their online courses are the same in virtual environment and traditional classes.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
2.	Instructors are using the latest instructional methods in online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
3.	Online classes can be implemented in both forms of synchronous and asynchronous communication.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
4.	Existing teaching methods are student-centred and engage students in learning activities in online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
5.	Students think that existing teaching methods provide adequate collaboration and interaction between students in online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
6.	Online courses engage students in discussions, collaborative work and problem solving.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
7.	Presenting case studies and articles on web pages is an effective method in online classes.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
8.	Online lectures are an effective instructional method in online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
9.	Participating in discussion forums in online classes help students to explore their own understanding from knowledge.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
10.	Create small group works in online courses develop learners' team working skills.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
11.	In online courses, continuous, immediate, and brief feedback is required in order to improve students' understanding, learning from their mistakes and success.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
12.	Students have access to a variety of resources such as online databases, experts, and libraries from anywhere.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
13.	Using appropriate tools and technologies can enhance the quality of interaction in online classes.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
14.	Students are using current technologies such as Facebook and YouTube in their online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
15.	Students think that "appropriateness of technology tools" in order to deliver course materials is significant.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

16.	Moodle provides an organized interface for online courses.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
17.	When email is used between instructors and students interchangeably, it can aid instructional process.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
18.	Q18.Synchronous learning methods involves different new communication tools.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
19.	Students think that probable technical problems may be troublesome and they need to improve their technical skills before starting online course.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
20.	Different learning styles of students have been supported by using a variety of instructional strategies.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

## **Appendix D: Consent Form for Students**

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

Name and Surname.....

Sign.....

Date.....

## **Appendix E: Semi-Structured Interview with Instructors**

Leila Mokhtari  
M.Sc Computer and Instructional  
Technology in Teacher Education  
05338539052  
leila.mokhtari1984@gmail.com

Dear Teachers,

The purpose of this Semi-Structured Interviews is to collect data about “Students’ perception of the online courses at the Department of Banking and Finance and Faculty of Tourism and Hospitality Management”. This research aims to answer the following as listed:

- To reveal students’ perception regarding the teaching methods which are being used by instructors in online courses.
- To assess students’ needs and their preferences regarding to teaching methods such as collaborative work, problem solving and discussion in online courses.
- To reveal students’ perception on educational technology tools which are used in online courses.
- To suggest a new online model of teaching method/s to instructors in order to support them to plan, deliver and make necessary changes when needed in their courses.
- To determine the pros and cons of online learning from students’ perception.

As a researcher, I would appreciate if you participate into this research. This is completely confidential and will not be used for any other purposes.  
Thank you very much for your contributions.

Leila Mokhtari  
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Technology in Teacher Education  
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Assist.Prof.Dr.Bengi Sonyel  
Educational Sciences  
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### **Semi-structured Interviews with Instructors**

Q1. Can you explain your methods and techniques in an online class that you apply? Why / why not?

Q2. Which tools and technologies do you think instructors should use to deliver their classes in online courses? Why / why not?

Q3. How do you enhance the interaction and collaboration between the students in an online course?

Q4. How do you monitor the students' activities in online classes?

Q5. How do you evaluate students' performance in online courses? Do you use ongoing evaluation process in your classes?

Q6. Considering the use and application of teaching methods and techniques, what are the advantages and disadvantages of online courses?

Q7. Do you have any suggestions to use more effective teaching methods and techniques in online courses?

## **Appendix F: Consent Form for Instructors**

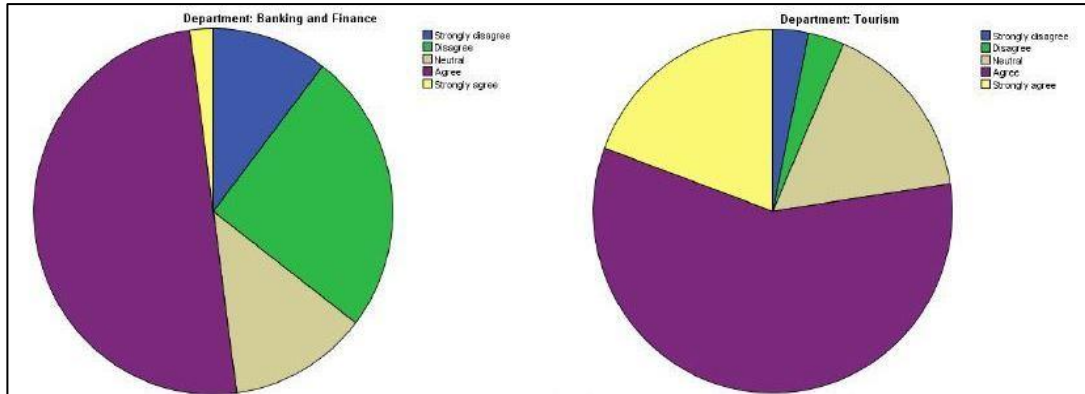
Regarding your inquiries about any aspect of the interview please don't hesitate to contact with me or with my supervisor. If you are willing to participate into this research please fill in your name and surname in the given blank space and sign.

Name and Surname.....

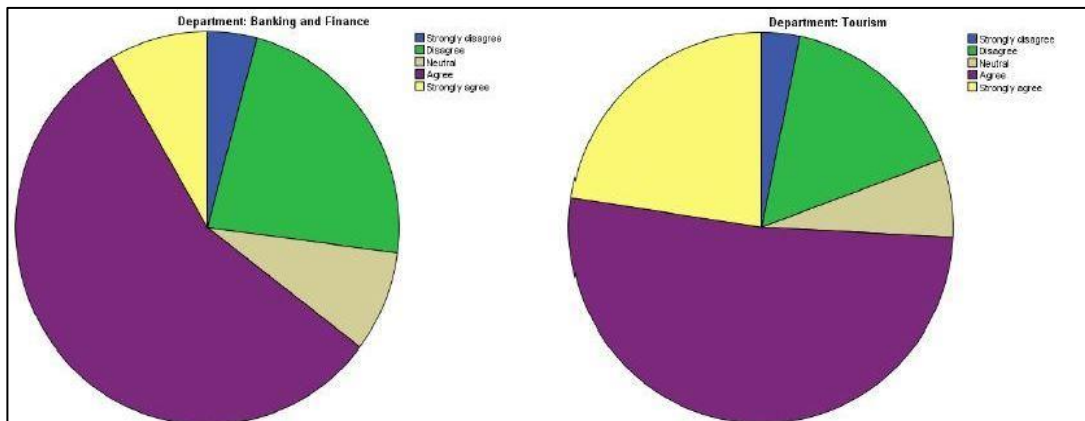
Sign.....

Date.....

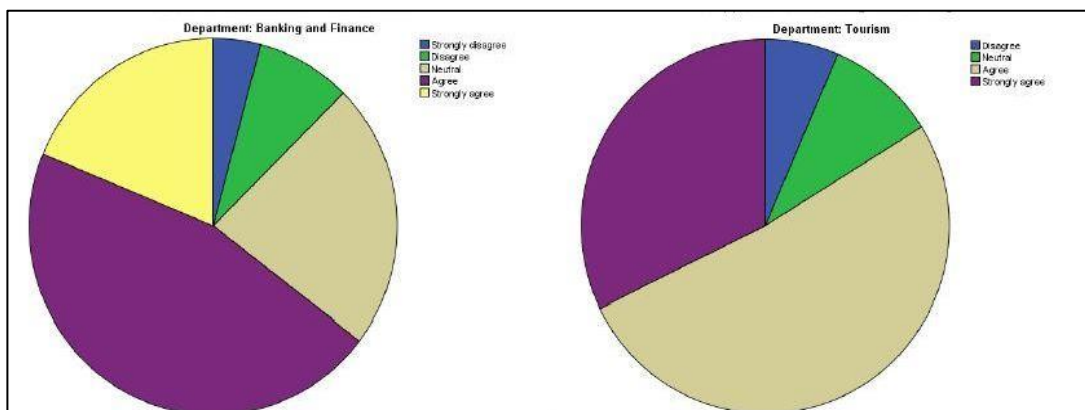
## Appendix G: Pie Charts



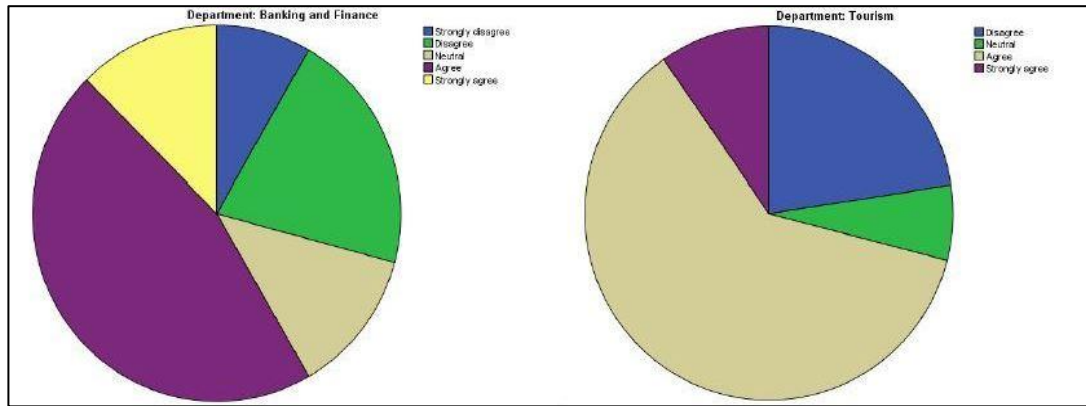
Pie Chart 1: Q1. Students think that the Instructional Methods that Instructors use in their Online Courses are the same in Virtual Environment and Traditional Classes.



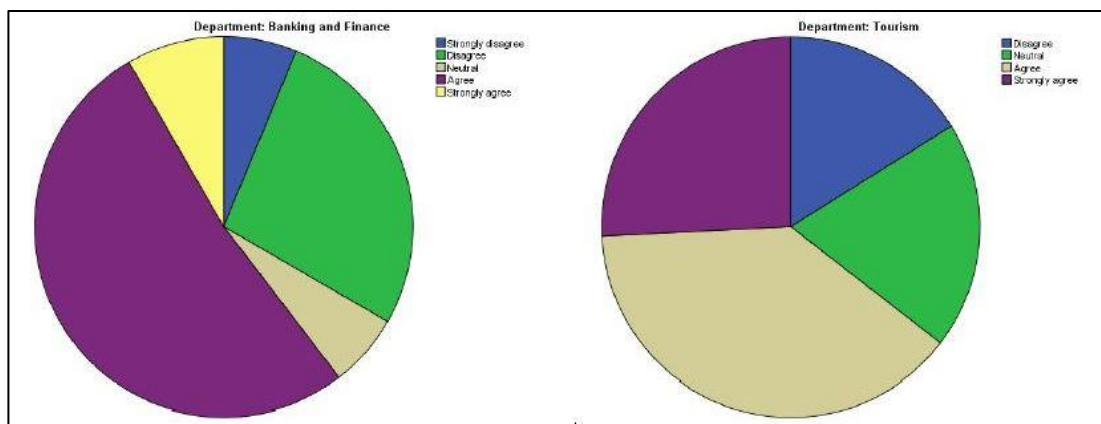
Pie Chart 2: Q2. Instructors are using the Latest Instructional Methods in Online Courses.



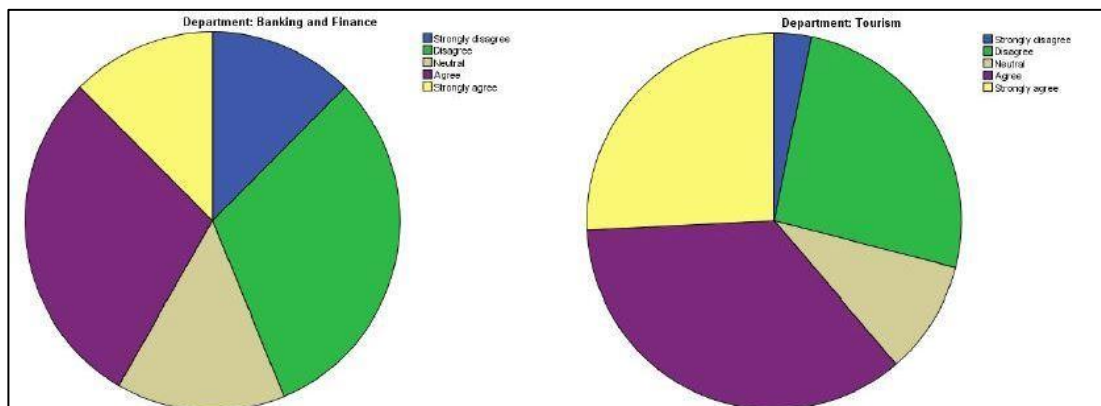
Pie Chart 2: Q3. Online Classes can be implemented in Both Forms of Synchronous and Asynchronous Communication



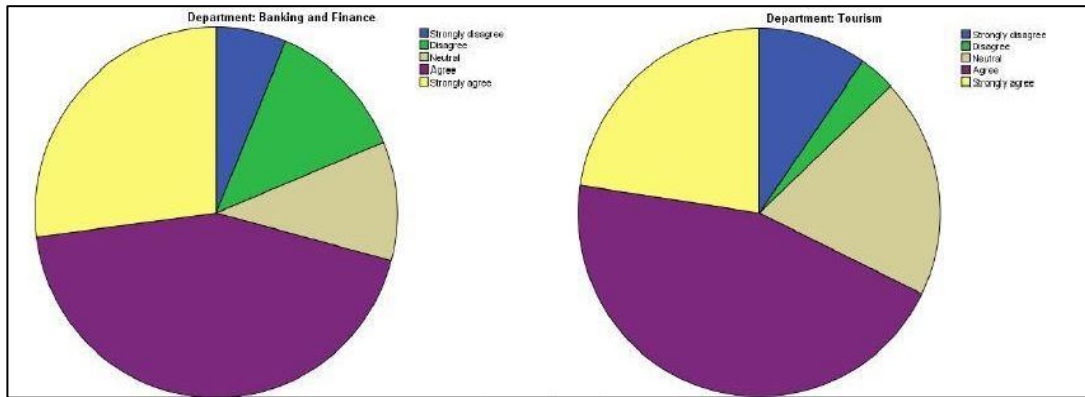
Pie Chart 3: Q4. Existing Teaching Methods are Student-Centered and engage Students in Learning Activities in Online Courses



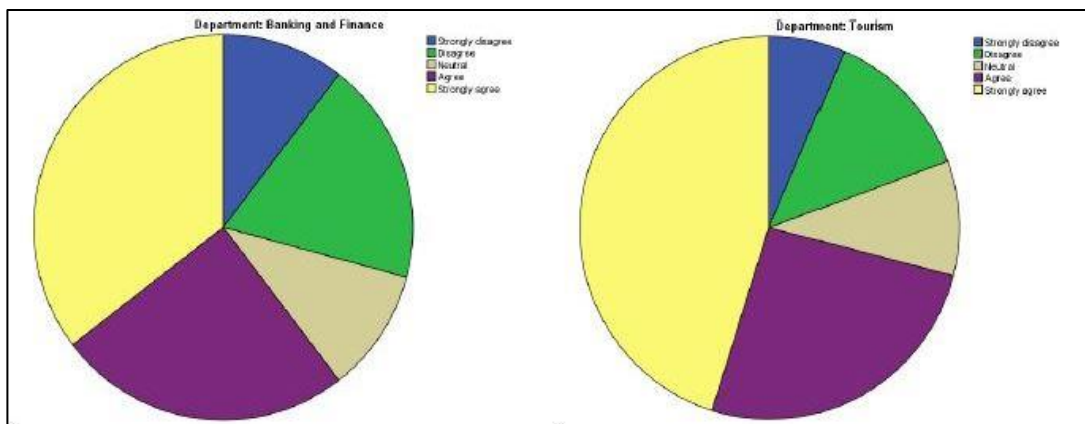
Pie Chart 4: Q5. Students think that existing Teaching Methods provide Adequate Collaboration and Interaction between Students in Online Courses



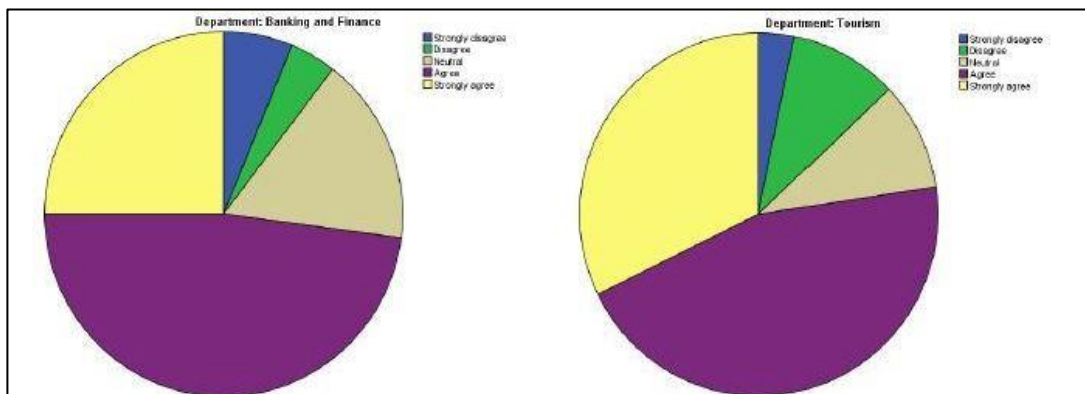
Pie Chart 6: Q6. Online Courses engage Students in Discussions, Collaborative Work and Problem Solving



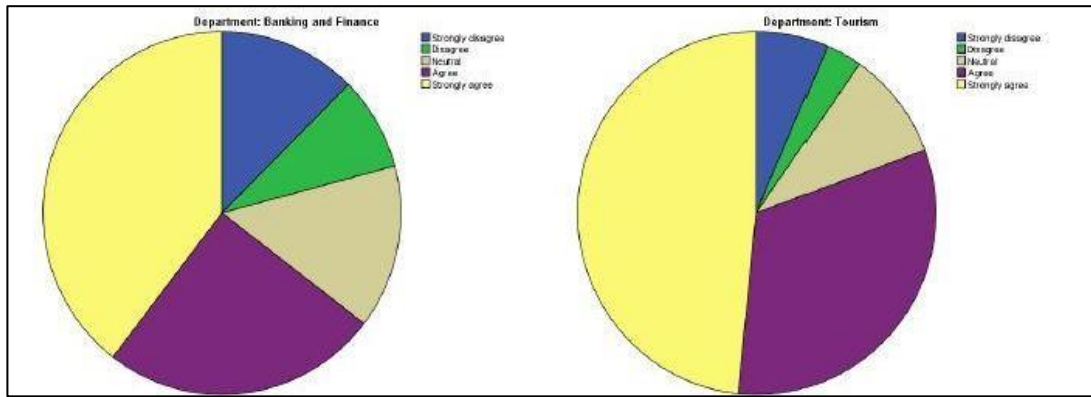
Pie Chart 5: Q7. Presenting Case Studies and Articles on Web Pages is an Effective Method in Online Classes



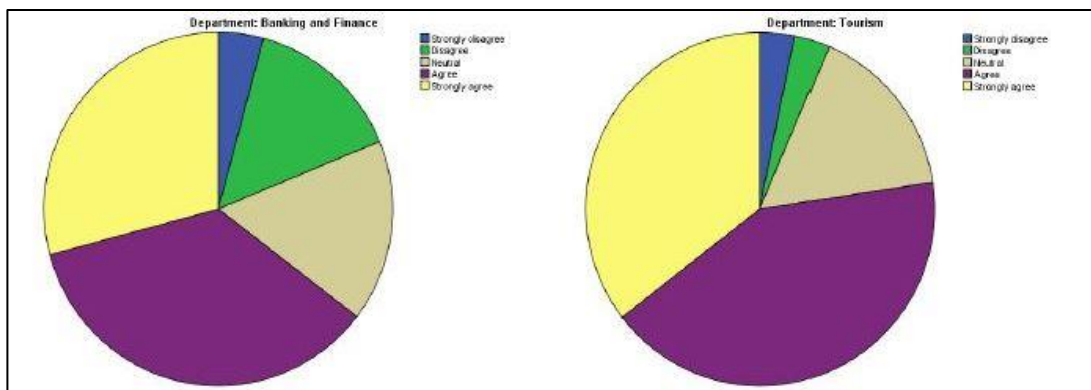
Pie Chart 6: Q8. Online Lectures are an Effective Instructional Method in Online Courses



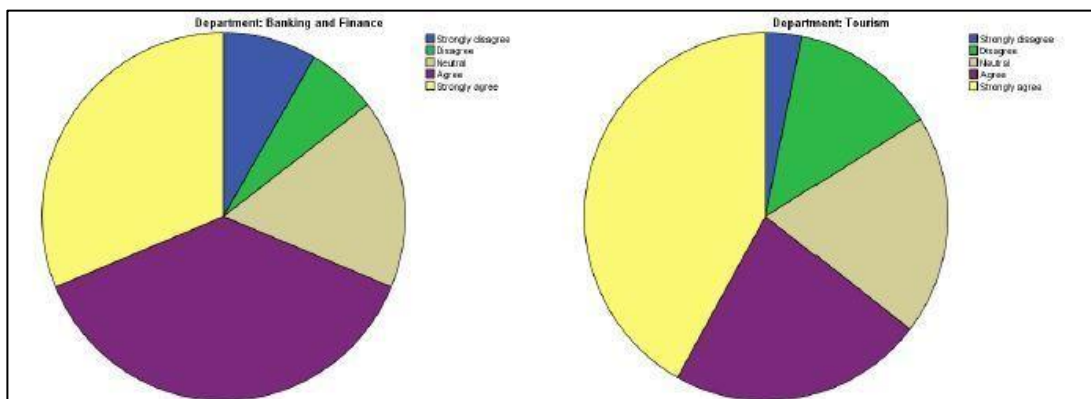
Pie Chart 9: Q9. Participating in Discussion Forums in Online Classes help Students to explore their own understanding from Knowledge



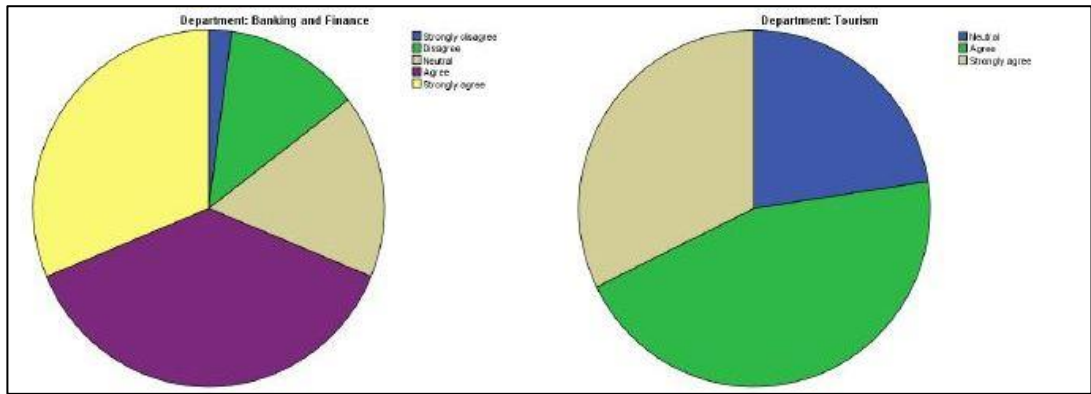
Pie Chart 7: Q10. Create Small Group Works in Online Courses develop Learners' Team Working Skills



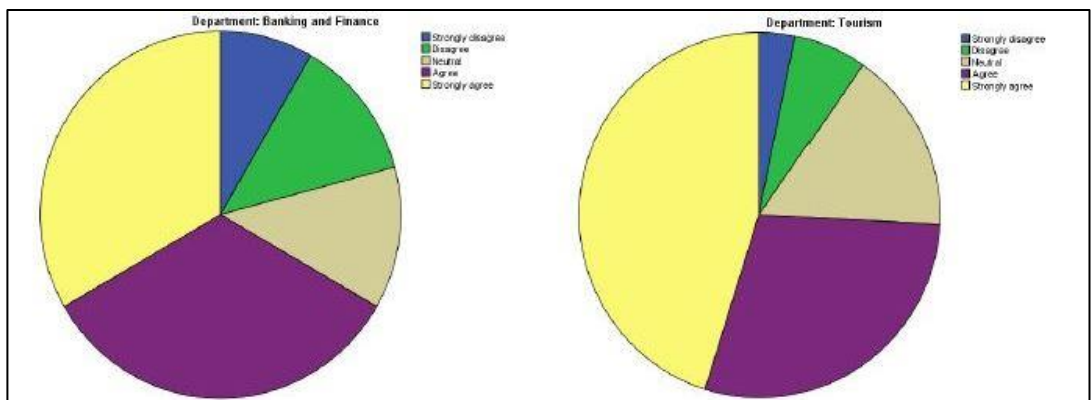
Pie Chart 8: Q11. In Online Courses, Continuous, Immediate and Brief Feedback are required in order to improve Students' understanding, learning from their Mistakes and Success



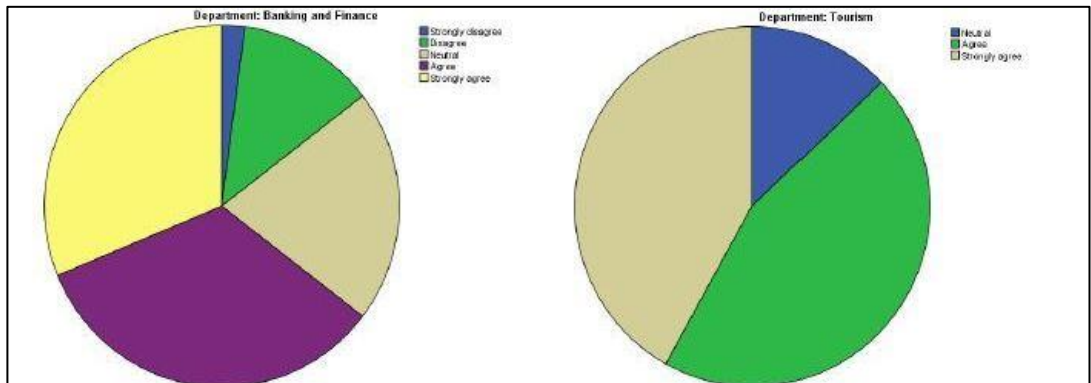
Pie Chart 12: Q12. Students have access to a Variety of Resources such as Online Databases, Experts, and Libraries from anywhere



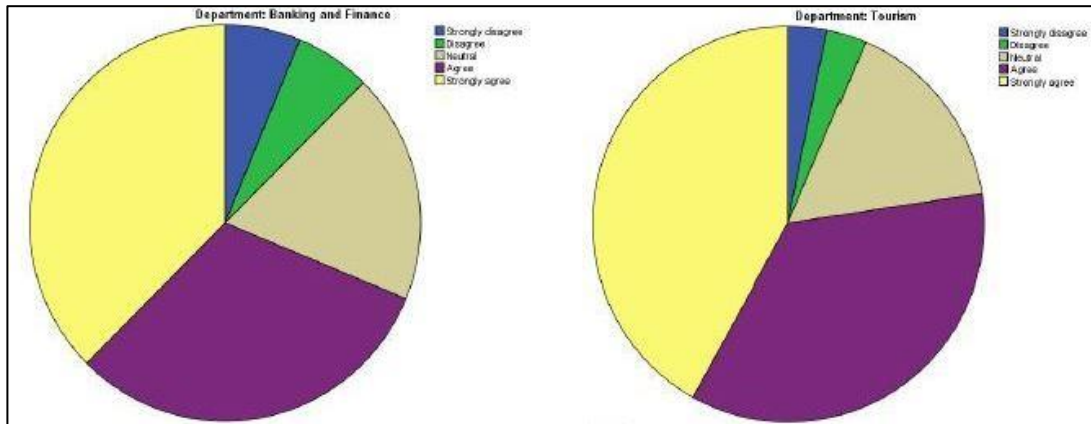
Pie Chart 13: Q13. Using Appropriate Tools and Technologies can enhance the Quality of Interaction in Online Classes



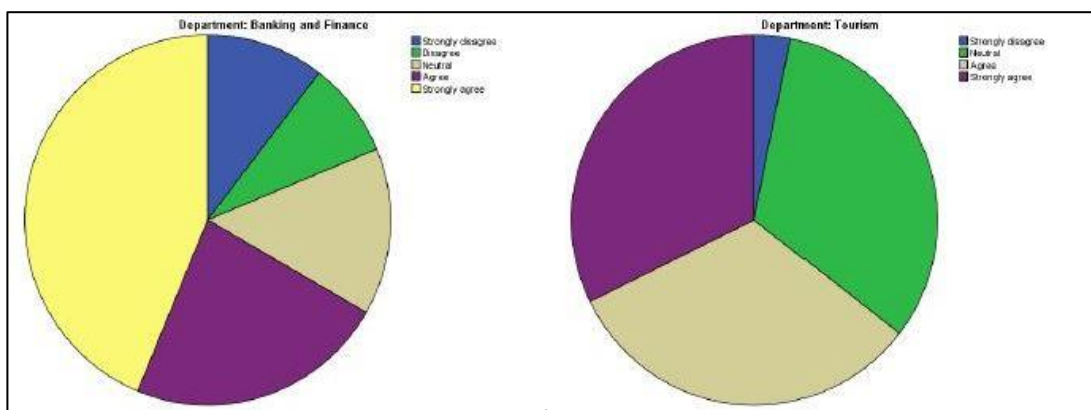
Pie Chart 9: Q14. Students are using Current Technologies such as Facebook and YouTube in their Online Courses



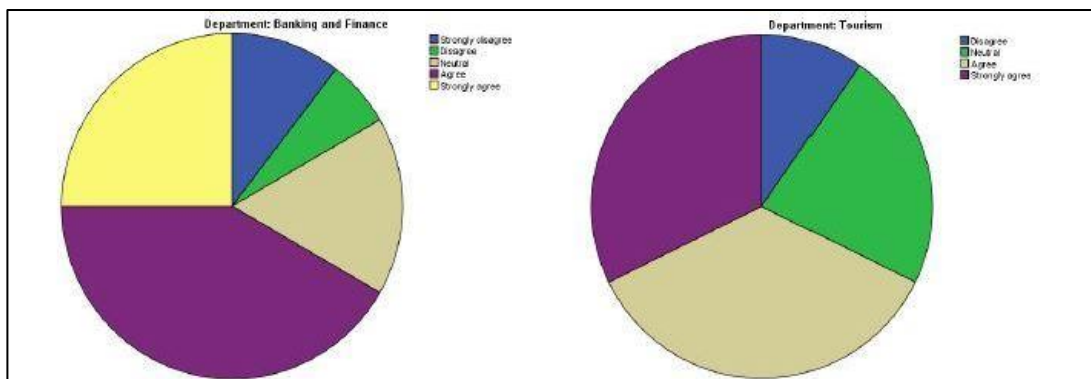
Pie Chart 10: Q15. Students think that "Appropriateness of Technology Tools" in order to deliver Course Materials is Significant



Pie Chart 11: Q16.Moodle provides an Organized Interface for Online Courses

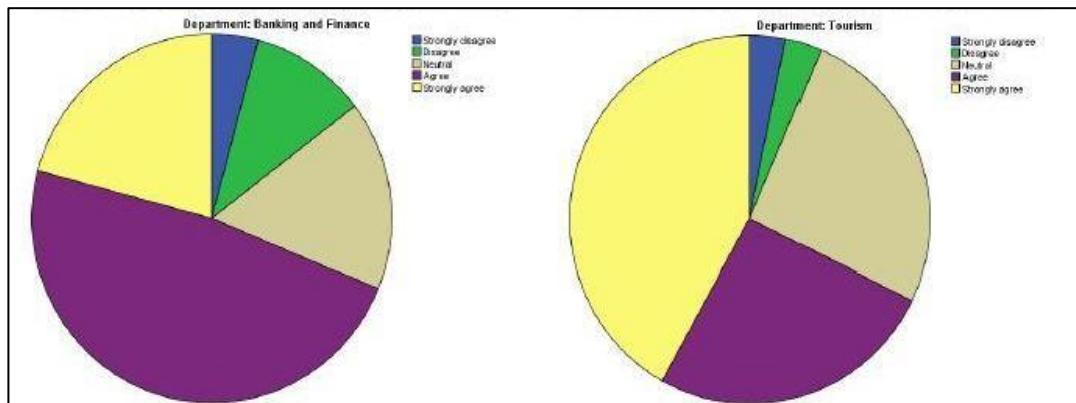


Pie Chart 17: Q17. When Email is used between Instructors and Students interchangeably, it can aid Instructional Process

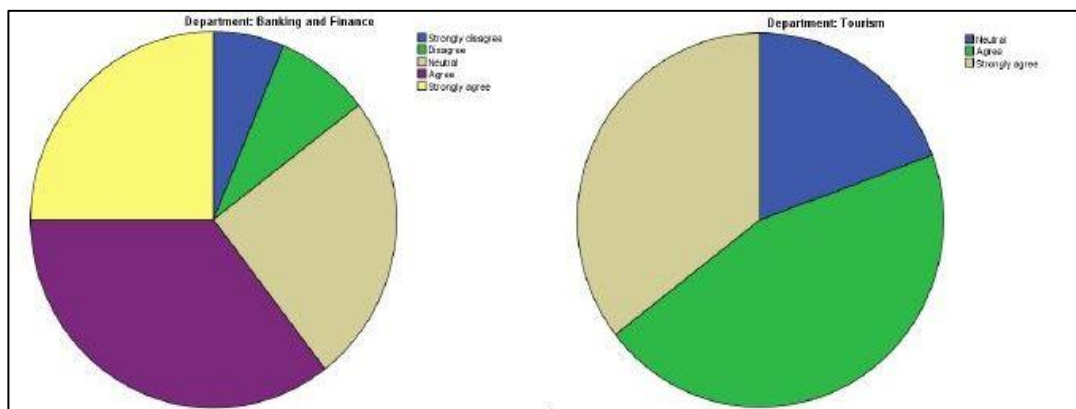


Pie Chart 12: Q18.Synchronous Learning Methods involves different New Communication Tools





Pie Chart 13: Q19.Students think that Probable Technical Problems may be Troublesome and they need to improve their Technical Skills before Starting Online Course.



Pie Chart 14: Q20.Different Learning Styles of Students have been supported by using a Variety of Instructional Strategies