# KARADENİZ TEKNİK ÜNİVERSİTESİ \* SOSYAL BİLİMLER ENSTİTÜSÜ

# BATI DİLLERİ VE EDEBİYATI ANABİLİM DALI UYGULAMALI DİL BİLİMİ YÜKSEK LİSANS PROGRAMI

# BLENDED ENGLISH COURSE WITH MOODLE

YÜKSEK LİSANS TEZİ

AYLİN ACAR

**NİSAN 2014** 

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# AYLİN ACAR

Tez Danışmanı: Doç. Dr. M. Naci Kayaoğlu

**NİSAN 2014** 

**TRABZON** 

# **ONAY**

Aylın ACAR tarafından hazırlanan Blended English Course with MOODLE adlı bu çalışma 28/03/2014 tarihinde yapılan savunma sınavı sonucunda oybirliği / <del>oyçokluğu</del> ile başarılı bulunarak jürimiz tarafından Uygulamalı Dilbilimi dalında **yüksek lisans tezi** olarak kabul edilmiştir.

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Yukarıdaki imzaların, adı geçen öğretim üyelerine ait olduklarını onaylarım. .../ .../

Prof. Dr. Ahmet ULUSOY

Enstitü Müdürü

# BİLDİRİM

Tez içindeki tüm bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, ayrıca tez yazım kurallarına uygun olarak hazırlanan bu çalışmada orijinal olmayan her türlü kaynağa eksiksiz atıf yapıldığını, aksinin ortaya çıkması durumunda her tür yasal sonucu kabul ettiğimi beyan ederim.

Aylin ACAR

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## ÖZET

Bu çalışmanın amacı, Türk lise öğrencilerinin açık kaynak kodlu öğretim yönetim sistemlerinden biri olan MOODLE sisteminin İngilizce harmanlanmış öğretiminde kullanımına yönelik tutumlarını araştırmaktır. Cinsiyet açısından tutumlardaki farklılıklar da araştırılmıştır. Ayrıca, İngilizce derslerinde, harmanlanmış öğretim için MOODLE sistemi kullanımının öğrenci başarısı üzerindeki etkisi de araştırılmıştır. Çalışma, bir deney ve bir kontrol grubu ile uygulanmıştır. Çalışmaya, kolaylıkla bulunabilen örnekleme tekniğine uygun olarak yaşları 16 ile 18 arasında değişen toplam 44 öğrenci katılmıştır. Kontrol grubu, 10'u kız, 12'si erkek olmak üzere 22 öğrenciden oluşmuştur. Deney grubu, 12'si kız, 10'u erkek olmak üzere 22 öğrenciden oluşmuştur. 15 haftalık uygulama sonrasında, deney grubuna anket ve yarı yapılandırılmış mülakat uygulanmıştır. Bunlara ek olarak, deney grubunun ikinci dönem sınav notları ile kontrol grubunun ikinci dönem sınav notları ile karşılaştırılmıştır. Yarı-yapılandırılmış mülakatlardan elde edilen nitel veriler içerik analizi yapılarak incelenmiştir. Anket ve sınavlardan elde edilen nicel veriler SPSS (16.0) yazılımı kullanılarak incelenmiştir. Ayrıca, eşleştirilmiş örnekler t-testi ve Mann-Whitney U-testi de uygulanmıştır. Anket ve mülakatlardan edinilen veriler, lise öğrencilerinin İngilizce harmanlanmış öğretiminde MOODLE sisteminin kullanımına yönelik olumlu tutum sergilediklerini göstermiştir. Cinsiyet açısından öğrencilerin tutumlarında anlamlı bir farklılık bulunmamıştır. Deney ve kontrol gruplarının 1. ve 2. dönem İngilizce sınav notları incelendiğinde, deney grubunun 1. ve 2. sınav notları arasında anlamlı bir farklılık tespit edilmiştir (t=-3.085 sig=0.005). Bu farklılık, İngilizce derslerinde harmanlanmış öğretim için MOODLE sistemi kullanımının öğrenci başarısını arttırdığını göstermektedir.

Anahtar sözcükler: MOODLE, harmanlanmış öğretim, kurs yönetim sistemi

#### **ABSTRACT**

The aim of this study is to investigate Turkish high school students' attitudes towards the use of MOODLE in English Language Teaching (ELT) blended instruction. Possible differences in attitudes in terms of gender are also investigated. In addition, the study intends to find out whether the use of MOODLE in English lessons as a tool for blended instruction makes a significant difference to the achievement of students. The study was conducted with one control and one experimental group. A total of 44 students participated in the study ranging in age from 16 to 18 selected on the basis of convenience sampling technique. The control group consisted of 22 students, 10 of whom were female and 12 male. The experimental group consisted of 22 students with 12 females and 10 males. After a fifteen-week treatment, a questionnaire and a semi-structured interview were administered to the experimental group. In addition, three exam results of an experimental group were compared with the exam results of a control group in the second semester. The qualitative data collected through semi-structured interviews were processed using content analysis. The quantitative data collected through questionnaires and exam results were analyzed using SPSS (v.16.0). Paired samples T-test and Mann-Whitney U-test were also applied to see the difference between the two groups. The overall analysis of the data from both questionnaires and interviews indicates that Turkish high school students who participated in this study have positive attitudes towards the use of MOODLE in ELT blended instruction. It is also found that there is no significant difference between the scale scores of the students in their attitudes towards the use of MOODLE according to gender difference. With regard to 1st term and 2nd term English exam scores of the experimental and the control group, there is a statistically significant differences between 1<sup>st</sup> and 2<sup>nd</sup> English exam scores of the students in the experimental group (t=-3.085 sig=0.005), indicating that the use of MOODLE in blended EFL lessons increased learners' achievement.

Key words: MOODLE, blended-learning, course management system

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## LIST OF ABBREVIATIONS

BEP : The Basic Education Program

BILGEM : General Directorate of Computer Education and Services

CAE : Computer-Aided Education

CMS : Course Management System

DynEd : Dynamic Education

EFL : English as a Foreign Language

ELT : English Language Teaching

ESOL : English to speakers of other languages

ICT : Information and Communication Technologies

IT : Information Technology

L2 : Second Language

LMS : Learning Management Systems

MONE : The Ministry of National Education

MOODLE : The Modular Object-Oriented Dynamic Learning Environment

OECD : The Organisation for Economic Co-operation and Development

SPSS : Statistical Package for Social Sciences

Std : Standard Deviation

UZEM : Distance Education Centre

VLE : Virtual Learning Environments

#### **CHAPTER ONE**

#### 1. INTRODUCTION

#### 1.1. Introduction

Technology has a great impact on education as well as every aspect of our lives, such as economy, health, agriculture, entertainment, culture etc.. The rapid developments in the field of information and communication technologies (ICT), and the spread of the internet worldwide, made technology an indispensable tool for education and for foreign language education as well. As a developing country, Turkey, as any other countries, needs to keep abreast of changes in education and adapt new technologies to its own education system (Akkoyunlu, 2002; Baytak, 2011).

The latest innovations in technology over the last decades made it vital to improve the education system. Recent studies in the area indicate that effective use of education technology can help education systems work better and more effectively (Jonassen & Reeves, 1996; Means, 1994). Within the context of English Language Teaching (ELT), it is believed that technology integration brings about innovations that make language learning both more authentic and meaningful (Warschauer & Kern, 2000; Warschauer & Meskill, 2000; Young, 2003).

Educational technology has been widely applied in English Language Teaching (ELT) for a long time. Especially since the 1990s, parallel with the developments in the information technology sector, it has become an indispensable part of ELT at all levels of education. Over this time, classroom use has moved from drill, text manipulation, and word processing to more interactive and communicative applications such as e-mail, chat, and web-based programs (Warschauer & Meskill, 2000). As teaching and learning gain new dimensions in today's world, due to the proliferation of ICT education, it becomes

independent of time and place. Consequently, learners and instructors have to challenge the new modes of learning and communication due to the proliferation of ICT (Kern, 2006).

It is always significant to raise the quality of instruction. Innovations and new approaches are seen as essential to improve the quality of studies in the field of ELT as well as other educational studies (Boticki, Hoic-Bozic & Mornar, 2009). One of these innovations is to use a course management system (CMS). CMSs are web applications that run on a server and are accessed by a web browser. These are systems that are used to simplify the creation and administration of learning content (Cole & Foster 2007). A CMS allows content to be stored, retrieved, edited, updated and then outputted in a variety of ways. These systems can be used to support face-to-face instruction or for complete online distance learning (Robb, 2004).

A great number of school faculty and administrators have begun utilizing CMSs (Bruce & Desloge, 1999; Lam, 2000). One of these CMSs is the modular object-oriented dynamic learning environment (MOODLE), which is a free, open source software package designed using sound pedagogical principles, to help educators create effective online learning communities (http://moodle.org/). It is also defined as "Learning Management Systems" (LMS), or "Virtual Learning Environments" (VLE). It was originally developed by Martin Dougiamas in 2002 to help educators create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution (Cole & Foster 2007). It facilitates online content creation and collaboration and entails various social and communication tools that support teacher-student, student-student, and teacherteacher interactions. As an open source product, MOODLE is flexible in its customisations, and its use is limited by the knowledge, learning, resources, and innovative spirit of its users rather than by the proprietary rights of vendors (Weber, 2003). MOODLE has a broad variety of features, and these features allow it to be used in a variety of ways depending on the needs and capabilities of the school or district, from simple classroom management to pure e-learning or a blended combination of the two, with e-learning contentandutilities extending on-site classroom learning. More importantly, it integrates many different systems like web page, wiki, blog, and bulletin board into a rich learning experience. The software is widely used by universities, schools, companies and independent teachers all over the world (http://moodle.org/).

In today's increasingly 'online' world, offering e-learning has become one of the alternatives in the dissemination of education and activating the training, whether direct or indirect, overcoming the obstacles of space, time and risk, and provided for the teacher's experiences effectively, enriched the learning and development of teaching (Elango, Gudep & Selvam, 2008). Besides full online courses, there is a new form of e-learning. This new form is typically referred to as blended education, which is defined as the combination of traditional and online teaching (Graham, 2006). Blended education, the integration of an online learning environment and a classroom environment, is likely to combine ideally the advantageous aspects of both types of instruction. Online or web-based learning environment provides the flexibility and the efficiency which cannot be assured in a classroom environment, whereas a face-to-face education class ensures interaction in which the students will need guidance for learning (Morgan, 2002).

English language instructors couldn't be indifferent to this type of education and blended instruction has also been applied to English language teaching all over the world. For instance; the University of Silesia in Poland and the Kanda University of International Studies in Japan provide blended courses in English language teaching on MOODLE.

#### 1.2. Statement of the Problem

English language teaching has become important, especially after the 1980s in Turkey, due to adaptation to globalization and European standards (Hismanoğlu, 2011). In addition to these, financial and economic considerations in the 1980s increased the importance of English language in Turkey (Atay, 2005). As a reflection of all these factors, the number of Anatolian high schools increased the need and in 1994, Super high schools were inaugurated by the Ministry of Education (MONE) (Acar, 2004). In both schools, students were exposed to intensive English. MONE's endeavours' to improve English language teaching in Turkey continued and, as a final application, English curricula of the primary schools has just been renewed and English has been incorporated into the 2<sup>nd</sup>

grade of primary schools (MONE, 2012). In addition to these, MONE has carried out a variety of projects to diffuse ICT at schools and stimulated the use of ICT, especially in the field of foreign language education, to overcome problems and bring innovation into education (Kırkgöz, 2007).

New technology has generally been seen as a solution to the problems that education systems face (McKendrick, 2001). Therefore, starting from the early days of technological advancements, educators have thought of finding ways to integrate technological innovations into education for the betterment of it. The use of instructional technology is seen as inevitable for effective outcomes in foreign language classrooms. Çakır (2006) assumes that technology is a part of the society, thus, language teachers can not be far away from using it. Studies show that supplementary on-line learning environments may enhance language learning and development (Kung & Chuo, 2002; Ware, 2004; Wang, 2005). In this context, MOODLE can be a useful supplement to the traditional curriculum of the English language learning classroom by developing students' language skills in a variety of ways.

Although MOODLE is not designed particularly for language teaching, it provides a number of useful learning tools that can be used in EFL/ESL settings. For example; Suvorov (2010) proposes its use for ESOL (English to speakers of other languages) writing classes because a typical MOODLE course consists of a set of tools that allow for the integration of a wide range of assignments, activities, and multimedia resources, electric delivery of teaching materials, synchronous and asynchronous teacher-student and student-student communication, and testing and assessment of students' work. Su (2006, p. 10) also claims that "MOODLE is a great tool for English teachers as a platform to save and archive teaching material easily as well as a collaborative platform for teachers and students to learn together". MOODLE can help English language teachers to create an authentic language environment to enable their students use English language.

Students learning a new language need as much language support as possible and any language support is helpful for their language acquisition. According to Liaw (1997), teachers should offer English language students a language-rich environment in which

students are constantly engaged in language activities. Nunan (1999) suggests 200 hours of instruction for adequate exposure to a second language (L2); the average instruction time students receive in compulsory English language education in state primary schools and high schools is far below this number. In addition to small amounts of class time, large classes are also an obstacle for different in-class language activities (Kırkgöz, 2008). The researcher decided to blend the traditional face-to-face English lessons with web-based support in order to overcome problems caused by insufficient class time and a large number of students as well as to supply a variety of activities that stimulate students to use English outside of the class. A CMS was needed to implement this blended study. After searching for CMSs on the market, the researcher found that most of them were feecharging for example; Blackboard and WebCT. Among free CMSs, MOODLE is accepted as the most popular and the easiest to use. In this regard, the researcher decided to conduct this blended study on MOODLE e-learning environment.

One of the most significant factors influencing the successful implementation of a new technology is students' attitudes. Attitudes are assessable reactions of an individual (Gardner, 1985). According to Kormos and Csizer (2007, p. 243), "attitudes are expected to shape the way people behave". Moreover, Liaw (2002) stresses that the effective implementation of technology depends upon users having positive attitude towards it. Kessler & Plakans (2001) also emphasize that no matter how enthusiastic the administrators and faculty were about implementing the systems or vice versa, students' perceptions and opinions should be taken into consideration for decision making. Therefore, this study focuses on exploring students' attitudes towards the use of MOODLE in English language teaching as a tool for blended instruction.

## 1.3. Significance of the Study

The need for a socially constructed environment for learning process has gained importance in English language teaching in Turkey as well as all over the world. The constructivist approach suggests that knowledge is actively constructed by the learner, not passively received from the environment (Piaget, 1975). Social constructivism is an extension to constructivism and focuses on the roles that society plays in the development

of an individual (Vygotsky, 1978). Social constructionism is based on the idea that people learn best when they are engaged in a social process of constructing knowledge through the act of constructing an artifact for others (Williams & Burden, 2000). The social world of a learner includes teachers, friends, students, administrators, and stakeholders in all forms of activity. Social constructivist perspective stresses the need for collaboration among learners and with practitioners in the society (Lave & Wenger, 1991). Collaboration and interaction can facilitate students' language development. In this regard, educators should create environments that enable students to study on foreign language activities collaboratively and enhance interaction among students.

Advancements in ICT in the last couple of decades have increased the opportunities to create constructivist environments. Within a constructivist environment, students not only learn from their teachers but also from their peers through collaboration and reflection on these experiences. McMahon (1997) describes the Internet as an ideal forum for constructivist learning, stating that it has a strong potential for social interactivity. Kaufman (2004, p. 306) describes the technologies that are based on constructivist principles as "powerful educational tools that extend human capabilities and contexts for social interactions". Woo and Reeves (2007, p. 20) also point out, "With the development of the Internet and its communication and sharing affordances such as e-mail, chat, web discussion forums, and other technologies, people are being exposed to more varied and frequent interaction opportunities than humans have ever experienced before". Educators should benefit from ICT and the Internet to create constructivist environments.

MOODLE, with its emphasis on constructivist and social constructionist approach to education, offers mediating tools which help to achieve the objectives of a social constructivist-based classroom in many ways (Baskerville & Robb, 2005). MOODLE transforms traditional teacher-centered pedagogy into a dialogic learner-centered pedagogy - a pedagogy whereby teacher and learner become mediators in co-constructing and navigating knowledge construction. MOODLE provide collaborative tools like email, chat, discussion forums, virtual classrooms and reflective journaling features that assist students as they construct knowledge (Dougiamas, 2000).

Although there are a great number of studies on the utilization of ICT in ELT and ELT students' attitudes towards ICT, there are few studies on the use of MOODLE in ELT in Turkey. The researcher found that existing studies on MOODLE in ELT have been conducted at university level and research at high school level is in great need. By studying the attitudes of ELT students at high school towards MOODLE, the researcher tries to fill this research gap in Turkey. Therefore, the study can give valuable insights into young ELT learners' opinions on the use of MOODLE for blended English teaching in Turkey. In addition, we can get information about whether or not this new e-learning tool contributes to students improvement in language. This study can be a beneficial guide for English teachers who look for new ideas to make their instruction more interesting and innovative. The findings of the study can also give valuable information to the MONE about integrating blended-instruction in EFL at high school level.

## 1.4. Purpose and Research Questions

The utilization of technology in ELT is an emerging field of study due to new instructional possibilities introduced by technological advances (Murray, 2007). One of the study fields is ELT students' attitudes towards new technology tools. An understanding derived from studying students' attitudes towards technology may help in planning and tuning the curricular units to the cognitive levels of students in order to achieve meaningful learning (Ausubel et al., 1978). Therefore, the purpose of this study is to investigate Turkish high school students' attitudes towards the use of MOODLE in ELT blended instruction. More specifically, the study aims to explore whether the use of MOODLE as a tool for blended instruction makes a difference in the success of students in English lesson.

The study aims to find answers to the following questions:

- 1. What are the attitudes of Turkish high school students towards the use of MOODLE in a blended English lesson?
- 2. Is there a significant difference between genders in their attitudes towards the use of MOODLE in a blended English lesson?

- 3. What are the Turkish high school students' perceptions of blended English lessons on MOODLE?
- 4. Is there a significant difference between genders in their perceptions of blended English lessons on MOODLE?
- 5. What is the impact of using MOODLE on EFL learners' achievement?

#### **CHAPTER TWO**

#### 2. LITERATURE REVIEW

#### 2.1. Introduction

This chapter reviews the literature and examines some of the potential issues and concerns in e-learning blended-learning course management systems and MOODLE. Firstly, a brief evolution of e-learning with the advantages and disadvantages is outlined. Secondly, there is a brief description of blended-learning and a discussion on the advantages and disadvantages of blended-learning. Thirdly, brief information about the use of ICT and the Internet, and the attempts to integrate ICT into ELT in Turkey are also provided. Next, course management systems and the implications in a blended-learning environment are summarised. Finally, there is an extensive description of MOODLE with a focus on its philosophy and benefits.

#### 2.2. E-learning

The exponential development of ICT got the classical method of learning and teaching changed, and the widespread ability of the Internet accelerated this change due to its capacity to offer multiple possibilities of access to information (Mahdizadeh, Biemans & Mulder, 2008). As a result, learning extended the walls of traditional classrooms (Zhang & Nunamaker, 2003) and a new learning structure appeared. This new learning paradigm is called electronic-learning (e-learning), online-learning or web-based learning. Today, there is a growing interest in e-learning all over the world (Kılıçkaya, 2009; Kumar, 2012 Seferoğlu, 2008). Not only academic institutions but also many private sector organizations use the Internet to deliver training (Stephenson, 2003).

Anderson and Eloumi (2004) define e-learning as "the use of the internet to access learning material; to interact with the content, instructor, and other learners; and to obtain

support during the learning process, in order to acquire knowledge, to construct personal meaning and to grow from the learning experience" (p. 5). E-learning is based on the following three fundamental criteria; (1) e-learning is networked, which makes it capable of instant updating, storage/ retrieval, distribution, and sharing of the instruction or information; (2) it is delivered to the end-user via a computer using standard Internet technology; and (3) it focuses on the broadest view of learning that goes beyond the traditional paradigms of training (Rosenberg 2001, pp. 28-29).

E-Learning provides a configurable infrastructure that integrates learning material, tools, and services into a single solution to create and deliver training or educational content quickly, effectively, and economically (Ong et al., 2004). The main characteristic of e-learning is easy universal access to educational courses, learning materials, and resources (Carliner, 2004; Moallem, 2003). Cantoni, Cellario, and Porta (2004) point out that e-learning is usually less expensive to deliver; it can be self-paced; it will not be restricted by physical location; it is more flexible in terms of time (learners are able to take sessions when they want); and it provides benefit to instructors who have to manage large groups of students. However, Selim (2007) and Artino (2008) assert that students should have high self-regulation, motivation and commitment to the learning process in e-learning.

In many forms of e-learning, content subject are often presented using a combination of visual and audio elements to improve learner's retention of the subject content. The interaction and communication between learners and instructors are often encouraged through the use of chat rooms, discussion boards, instant messaging and email. E-learning also makes it possible for learners to customize learning materials to their own needs, leading to more effective learning and hence a faster learning curve when compared to instructor-led training (Rosen, 2009).

The present day's e-learning programs can trace their roots back to those primitive online education programs in the 1970s (Lau, 2000). In the early 1970s, online education programs were limited and not very technologically creative due to the development of computer networks (Harasim, 1990). In Turkey, from 1997 different universities offer e-

learning programs for graduate programs, vocational schools of higher education and certification. Also several information technology (IT) companies provide IT certificates with e-learning programs in Turkey (Yazıcı, Altas & Demiray, 2001).

## 2.2.1. Definition of E-learning

The most common definition of e-learning is that it is a delivery system. E-Learning is the use of ICT to deliver information for education and training (Sun et al., 2008). It refers to the use of electronic devices for learning, including the delivery of content via electronic media such as Internet/Intranet/Extranet, audio or video tape, satellite broadcast, interactive TV, CD-ROM, and so on (Kaplan-Leiserson, 2000). E-learning is a form of learning delivered via computers over the Internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV or CD-ROM (Hall & Snider, 2000). It is defined as 'the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance' (Rosenberg 2001, p. 28). Clark and Mayer (2002, p. 13) define e-learning as "an instruction delivered on a computer by way of CD-ROM, internet or intranet". Harris (1999, p. XI) states that e-learning is internet-based learning in which educational actions and functions delivered by the Internet are organized systematically as a part of an educational program. Garrison & Anderson (2003) define e-learning as "... networked, on-line learning that takes place in a formal context and uses a range of multimedia technologies".

On the other hand, Smith & Meyen (2003, p. 1) advocate that e-learning is not a delivery system but "a new form of pedagogy" improving the quality of teaching. E-learning is more than a particular program or a single technology. It is "a way of using tools and technology to stimulate learning" (Horton (2002, p.4).

Khan (1997) provides an extensive definition that e-learning is the use of Internet to access learning materials; to interact with the content, instructor and other learners, and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience whereas Carliner (2004) defines online learning as educational material that is presented on a computer. Zahner

(2002, p. 12) also gives another description that "e-learning is an extension of the traditional courses, classes or training sessions to the desktop where learning opportunities can be provided in asynchronous, self-paced formats or in synchronous virtual classes".

In summary, e-learning is a general term used to refer to a form of learning in which the instructor and student are separated by space or time, where the gap between the two is bridged through the use of online technologies. E-learning comprises all forms of electronically supported learning and teaching.

## 2.2.2. Synchronous vs. Asynchronous E-Learning

E-learning can be either synchronous i.e., real time chat, video/audio conferencing, web-based and computer conferencing (Ryan, 2001) or asynchronous i.e., self-paced courses taken via the Internet, online discussion groups, and email (Kaplan-Leiserson, 2000). Today, many universities in Turkey, e.g. Karadeniz Technical University, Hacettepe University and Kocaeli University, have a distance education centre (UZEM) which run synchronous and asynchronous programs.

Synchronous e-learning requires simultaneous participation of all learners and instructors at different locations. It indicates any learning event delivered in real-time to remote learners, which includes immediate, two-way communication among participants. The main tool used for the implementation of synchronous communication is videoconferencing. With this technology, two or more people at different locations can see and hear each other at the same time, sometimes even sharing computer applications for collaboration (Kaplan-Leiserson, 2000). Synchronous learning has the obvious advantage of providing immediate access and feedback from the instructor. This face-to-face (real or virtual) access to the instructor has a cost to the learning measured in commitment to a schedule and, in some cases, to a location. Synchronous learning is advantageous when the benefit of the "live" interaction is greater than the drawbacks of a commitment to schedule and/or location (Rosen, 2009).

Contrary to synchronous e-learning, asynchronous e-learning does not require simultaneous participation of learners and instructors. It refers to a learning situation where the learning event does not take place in real-time. Asynchronous communication is particularly suited for activities where a learner is supposed to learn at his own pace and according to his needs (Sharma & Fiedler, 2004). Thus, it gives learners more control over the learning process and content. On the other hand, there can be problems when two or more group members coming from different countries or having different background knowledge and/or who have not previously worked together are expected to work on a task electronically. Additionally, feelings of isolation are usually common for students who participate in asynchronous communication, causing motivation reduction for learning. Students do not receive instant feedback from their questions and cannot talk in real time about results obtained in the learning activities (Rosen, 2009). Table 1 taken from Rosen (2009) outlines the differences between two kinds of e-learning.

**Table 1: Synchronous versus Asynchronous Features** 

Synchronous	Asynchronous
Content needs an instructor with a clear need for communication between instructor and student (instructor face time).	Content can stand on its own.
Instructor is available when students are available.	Course is available 24/7.
Students are not necessarily self-motivated.	Students need just-in-time training (available when they are, not when the instructor is available).
Instructor is changing content in real time (content is not finished).	Courses that can be used as a corporate resource, a reference for increasing productivity (e.g., can be accessed by a knowledge management system).

**Source:** Rosen, 2009, p. 61

Synchronous e-learning enables individuals to feel more like they are members of a learning society than asynchronous learning, and interaction among students and instructors is done in real-time. However, it loses time flexibility. Currently, the majority of

e-learning systems use asynchronous communication technologies because they are simpler to develop and not too expensive compared to the synchronous ones (Rosen, 2009).

## 2.2.3. Advantages and Disadvantages of E-learning

The advantages of e-learning are multiple. One of its advantages is to provide new ways for better resource utilization and desirable flexible methodologies to the benefit of the learner, the teacher and the institution (Halis, 2001; Aşkar, 2003). According to Gold (2001), e-learning is the fastest way to meet needs for training and education.

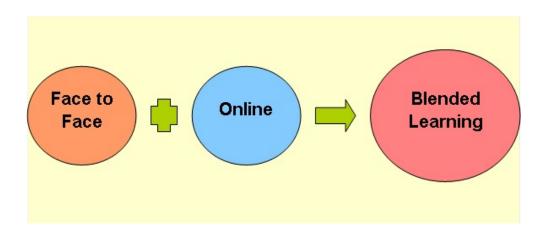
E-learning provides time and location flexibility; results in cost and time savings for educational institutions and firms; fosters self-directed and self-paced learning by enabling learner-centred activities; creates a collaborative learning environment by linking each learner with physically dispersed experts and peers; allows unlimited access to electronic learning material; and allows knowledge to be updated and maintained in a more timely and efficient manner (Rosenberg, 2001; Zhang et al., 2006). Additionally, e-learning provides learners with flexible tools to interact with instructional materials in various formats (text, graphics, audio, and video) anywhere and at any time (Lee, 2008).

While e-learning has many benefits, there are also potential disadvantages or limitations of e-learning. One of the most important problems is the lack of face to face interaction with instructors and classmates (Carstens & Worsfold, 2000; Yazon, Mayer-Smith & Redfield, 2002). This causes a sense of learner isolation (Brown, 1996) and frustration, anxiety, and confusion (Hara & Kling, 2000). As a result, there is high dropout rates and lack of accountability (Sullivan, 2001). Another problem is the lack of hands-on activities (Riffell & Sibley, 2005). E-learning also requires self-discipline and self-motivation (Golladay, Prybutok, & Huff, 2000; Serwatka, 2003). These disadvantages have triggered search for a new environment called blended-learning which combines the advantages of e-learning and classical learning environments.

## 2.3. Blended-learning

The term hybrid e-learning is used to describe a learning situation that combines several e-learning technologies and tools with face-to-face instructor-lead interaction (El-Deghaidy & Nouby, 2008). In recent years, blended learning is attracting more attentions as it incorporates the benefits of traditional teacher-centred classroom teaching and web-based learning. As an alternative to traditional face to face instruction, blended learning has been adopted by more and more educators and learners (Bonk & Graham, 2006).

The interest in hybrid e-learning started around 2000 and since then it has been affecting and changing higher education, because it has the potential to capture the benefits of pure e-learning while retaining the benefits of traditional instruction (Webb, Gill & Poe, 2005). Blended learning aims to reach beyond the potential of each individual approach (face- to- face/online) to create a new "whole" and transform both the structure and method to teaching and learning (Allen, Seaman & Garrett, 2007). Table 2 figures the combination of face-to-face and e-learning into blended-learning.



**Table 2: Blended Learning** 

Blended learning is a flexible approach to course design that supports the blending of different times and places for learning, offering some of the conveniences of fully online courses without the complete loss of face-to-face contact (Collis & Moonen, 2001). It requires course reconceptualisation and redesign, as well as the mastery of skills for

teaching in both online and face-to-face environments (Garrison & Kanuka, 2004; Garrison & Vaughan, 2008). Also, blended learning both requires and supports an independent, autonomous learner. Learner autonomy involves learners being aware of their own ways of learning, so as to utilize their strengths and work on their weaknesses (Van Lier, 1996).

The major challenge of blended learning is to determine the appropriate mixture of face-to-face and online components for a course — that is, what and how to combine class time with online learning (Olapiriyakul & Scher, 2006). There is no one formula for designing blended courses; in fact, blended learning designs vary widely depending on the nature of the course content, the audience or students, the goals of the course, the instructor, and the technology available (Garrison & Kanuka, 2004; Garrison & Vaughan, 2008; Osguthorpe & Graham, 2003). The choice of a blend is usually determined by several factors: the nature of the course content and instructional goals, student characteristics and learning preferences, instructor experience and teaching style, online resources and others (Dziuban, Hartman & Moskal, 2004). Blended learning can take a variety of forms due to (a) the array of functions it can serve, (b) the fluidity of technologies that exist, (c) the numerous ways to apply technology, and (d) the diversity of disciplines and ways courses are organized (Voos, 2003).

Course management systems are tools in blended learning context. One important and versatile tool in blended learning is the learning platform MOODLE.

## 2.3.1. Definition of Blended Learning

There are numerous definitions of blended learning. Clark and Myer (2002) indicate that there is no exact definition of blended learning and it may refer to different meanings for different people. Graham, Allen and Ure (2003 as cited in Graham 2006, p.4) categorize the term into three items: (1) instructional modalities, (2) instructional methods, (3) face-to-face instruction and computer-mediated instruction.

The instructional modalities define blended learning as a combination of different modes or delivery media. Singh and Reed (2001) describe blended learning as a learning

program where more than one delivery mode is being used with the objective of optimizing the learning outcome and cost of program delivery. On the other hand, Valiathan (2002) sees blended learning as a solution that combines some different delivery methods like collaboration software, web based courses and knowledge management practices. Finn and Bucceri (2004) similarly define blended learning as "the effective integration of various learning techniques, technologies, and delivery modalities to meet specific communication, knowledge sharing, and information needs (Finn and Bucceri, 2004, p. 2).

The instructional methods view blended learning as a combination of different instructional methods or strategies. Blended learning is "specific educational and training situations, where different instructional strategies and delivery mechanisms are combined" (Sharma and Fiedler, 2004, p. 544). Rossett and Frazee (2006), define blended learning as the integration of multiple learning techniques.

The third definition category defines blended learning as a combination of face to face instruction and computer mediated instruction which is the most common type of definition. Blended learning refers to "courses that combine face-to-face classroom instruction with online learning and reduced classroom contact hours" (Dziuban, Hartman, & Moskal, 2004, p. 3). The term "blended learning" often refers to a course methodology or learning activity that combines online and traditional face to face instruction (de Leng et, al., 2010). Courses and programs that combine Internet- based and traditional education components are often referred as blended (Miller & King, 2003). Littlejohn and Pegler (2007) perceive blended learning as an integration of face to face teaching and learning methods with online approaches. Osguthorpe and Graham (2003) advocate for the use of the term blended, as it highlights the goal of such an approach to balance, or find harmony in, the combination of face-to-face and online methods or platforms for learning.

In general, blended learning is a mixture of instructional modalities, delivery media, instructional methods and web-based technologies.

# 2.3.2. Advantages and Disadvantages of Blended Learning

Blended learning has many advantages, which make it more popular among teachers and students. The main advantage of blended learning environments is the "ability to support different modes of communication and interaction" (Sharma & Fiedler, 2004, p. 545). This enables the opportunity to improve teaching and learning strategies (Dziuban, Hartman & Moskal, 2004).

Garrison and Kanuka (2004) compared blended learning environments with traditional learning environments and observed that more effective and efficient learning occurs in a blended learning environment and that the success level of students is raised. Blended learning provides the largest set of instructional methods and learning situations to meet the needs of disciplines, courses, and students (Voos, 2003) and allows the instructor to maximize the advantages of each environment (Dziuban, Hartman, & Moskal, 2004; Osguthorpe & Graham, 2003). Face-to-face classroom builds the social interactions between students and with faculty while the online environment provides a forum for extended communication beyond the classroom time frame as a result both student to student and student to faculty interaction significantly increases in blended courses (Dzuiban, Hartman, & Moskal, 2004; Garnham & Kaleta, 2002). Face to face discussions are spontaneous, can create energy and enthusiasm, build relationships, and cultivate a sense of community in the classroom (Garrison & Vaughan, 2008), while Internet-based discussion forums can offer scheduling flexibility, promote interactivity, and foster community building.

The blended learning format provides a more flexible use of instructional time to achieve goals and objectives more successfully (Garnham & Kaleta, 2002). Reduced seat time in blended learning courses provides the socialization and interaction of the face-to-face classroom while providing the convenience and flexibility by reducing the time and place constraints (Garnham & Kaleta, 2002; King, 2002).

Carman (2002) states that people are not single- method learners and tend to perform better when they have a mix of modalities and methods for learning. In short, the

successful combination of online and traditional components can provide educational opportunities that engage diverse learners, are self- directed and flexible, reduce isolation and promote community among students, and achieve high levels of student satisfaction and learning outcomes (Garnham & Kaleta, 2002; Vaughan, 2007).

Previous research show that in blended learning, students are better prepared for class (Bauer, 2001), write more effective and longer papers (Garnham & Kaleta, 2002), perform better on exams (Garnham & Kaleta, 2002), produce higher quality projects (Cameron, 2003), have deeper and more meaningful discussions on course material (King, 2002), and demonstrate a better understanding and deeper exploration of concepts (Bauer, 2001; Cameron, 2003). In a study conducted to compare traditional and hybrid e-learning instruction methods in eight sections of a business communications class, an improvement in writing skills was found in students who participated in the hybrid course, particularly for those whom English is a second language (Sauers & Walker, 2004).

Bai (2008) states that blended learning includes these following benefits: 1.Students can learn synchronically and diachronically. 2. Blended learning can satisfy learners' individualized needs and interest. 3. Students can acquire knowledge systematically and have opportunities to apply them. 4. Blended learning can help develop learner autonomy. 5. Blended learning provides more language input and output opportunities. 6. Blended learning helps to create favourable and harmonious learning environment. In addition to these blended learning can be applied to students with different learning styles and levels (Marsh, 2002). McCray (2000) also found courses that combine online learning with the traditional classroom can help students to become more engaged in rich classroom interactions by appealing to different learning styles through variety in content delivery.

On the other hand, it can cause problems if blended-learning is not formed carefully. Chew, Jones, and Turner (2008) underlined that in every blend of educational technology and education there should be educational science and social science. Clark (2003) also stressed that there should be a rationale behind the blending models. It should be designed to provide better learning environments for learners, not because many channels are available. Blending multi technologies or/and instructional environments without significant justifications may result a chaos for learners.

#### 2.4. ICT and Internet in ELT

The advancements of information communication technologies (ICT) and Internet has greatly affected education including language teaching. The use of ICT and Internet in language teaching has provided new opportunities for language teachers to have more interactive and learner-centred classroom environment (Chou, 2010).

ICT and the Internet are powerful tools to assist language teaching (Warschauer & Meskill, 2000). These tools provide a vast amount of authentic learning resources. For example, on-line newspapers and podcasts are culturally richer than regular materials, more likely to reflect the complexities of real-life language and potentially more interesting for learners (Bell, 2005). They help learners to learn vocabulary better with the support of visual media (Arıkan & Taraf, 2010; Saran & Seferoğlu, 2010; Kılıçkaya & Krajka, 2010; Kayaoğlu, Akbaş & Öztürk, 2011; Karakaş & Sarıçoban, 2012), improve their writing skills by providing chances for authentic written communication (Kayaoğlu, 2008; Kayaoğlu, 2009; Koçoğlu, 2010), increase their reading ability by providing a vast source of authentic texts (Şimşek, 2008; Koçoğlu, 2010), enable students to learn how to pronounce foreign words appropriately by providing native speakers' correct pronunciation of words (Hismanoğlu & Hismanoğlu, 2011; Seferoğlu, 2005) and improve students' knowledge (Arıkan & Taraf, 2010; Baturay, Daloğlu & Yıldırım, 2010; grammar Kılıçkaya, 2013; Uzunboylu, 2004). As a result, students can engage in more meaningful tasks (Kim, 2004). The authentic opportunities the Internet provides also increase language learners' motivation toward learning activities (Warschauer, 1996; Gitsaki & Taylor, 2000; Ilter, 2009). Dunkel (1990) asserts that ICT as a teaching tool can increase language learners' self-esteem, vocational preparedness, language proficiency and overall academic skills. In addition, using the Internet for ELT enhances student autonomy (Mougalian & Salazar, 2006) and gives learners the opportunity to manage their own learning (Gitsaki & Taylor, 2000).

Authentic language use is a key element in successful language learning. The Internet provides great opportunity for the language learners to have authentic communication with native speakers (Altun, 2005; Liu et al., 2002; Kılıçkaya & Seferoğlu,

2013). Windeatt, Hardisty and Eastment (2000) state that "as a means of communication, the Internet allows students around the world to interact with one another cheaply quickly and reliably opening up the classroom to the real world in a way which has never before been possible" (p.6). Giving the learners the chance for authentic and meaningful communication helps to foster the language skills and increase learners' motivation to learn the English language (Rico & Vinagre, 2000; Ilter, 2009). The authentic language use not only during the lesson but also outside the class makes learning English part of students' daily lives and an ongoing process (Gitsaki & Taylor, 2000; Tılfarlıoğlu, 2011).

The use of the Internet and ICT makes language learning flexible and allow learners to learn language when and where they want. They also offer the possibility of instant feedback to learners. Thus, classroom dialogue extends beyond the time and space constraints of class time (Fryer, 1997) and as a result, learner-learner and learner-teacher interaction increase (Godwin-Jones, 2003). Through e-mail, conferencing tools and newsgroups, a virtual community of learners can exchange knowledge, ideas and perspectives on certain issues or topics. This greatly enhances the learning experience (Warschauer, 2000).

The advancement of ICT and the Internet has also created new ways of learning and teaching ELT and enabled the rapid growth of blended and online English courses. Blended language learning classrooms enable language teachers to tutor and support their learners more effectively. In a broad survey of learners' perceptions and attitudes to language learning activities delivered on the Web, Felix (2001, p. 314) found that learners perceived the Web "as a viable environment for language learning in tertiary settings, especially as an add-on to face-to-face teaching". The integration of ICT in ELT has not only affected the manner of teaching and learning but also has changed the roles of teachers from that of instructor to that of constructors, facilitators and creators of learning environment.

In addition, ICT and especially the Internet help to create environments for collaboration among ELT learners as well as teachers. The collaborative learning has become increasingly important in education and the Internet provides great opportunities for interaction with other people, reciprocal exchanges of support and ideas, joint work on

the development of performances and products, and co-construction of understandings through comparing alternative ideas and interpretations (Redmond & Lock, 2006). International collaborative projects have become more feasible through the Internet. By the help of the Internet, learners can contact and communicate with other learners from foreign countries, participate in blog discussions, work in teams on different projects, exchange emails, search for information, etc. and so forth.Suh (2005) asserts that on-line collaboration can enhance learners' understanding and keep students more engaged. Redmond and Lock (2006) also claim that it helps to develop critical thinking skills by exposing individuals to different perspectives.

Regarding all these, it can be said that ICT and the Internet are indispensible and significant for language teaching (Yang, 2001; Gonglewski, Meloni & Brant, 2001). According to Dettori and Lupi (2010), web technologies turn the online venues into language learning places. In addition, Brown (2003) states that internet and ICT increase the quality of language learning and provide available education.

# 2.5. The Integration of ICT into ELT in Turkey

There is a growing interest in the integration of ICT into classrooms as it is assumed that successful integration will offer a wide spectrum of valuable benefits for teaching and learning (Cope & Ward, 2002). The use of ICT in schools is also underlined by OECD (2001) as necessity for improving quality in teaching and learning. Regarding the benefits of ICT in education, Ministry of National Education (MONE) in Turkey has made huge investments in the hope of attaining the goal of improving the quality of education through enriching the learning environment with the help of ICT and the Internet (Gülbahar & Güven, 2008).

Computers were first integrated into Turkish schools in 1984 by initiating Computer-Aided Education (CAE) Project, which was conducted between 1984 and 1986. One of the programs to implement technology was The Basic Education Program (BEP) Turkey with the help of the World Bank made an enormous investment in bringing educational technology into classrooms. The BEP loan agreement was signed between the

International Bank of Reconstruction and Development (World Bank) and the Turkish Government in 1998. The program consists of two phases. The first phase of the program focused on establishing ICT classrooms. The second phase of the program supports a continuation and extension of the activities supported under the first phase the program. In accordance with this program, in 1992 General Directorate of Computer Education and Services (BILGEM) was established by MONE to plan the deployment of computers in education at every level and type of school, educate operating staff, promote Computer Aided Instruction in line with technological innovations, and do tasks with respect to information processing (Özar & Aşkar, 1997).

In terms of English language teaching, MONE took a significant step to integrate ICT in 2007. MONE initiated a language learning computer software called Dynamic Education (DynEd) for English lessons in elementary schools (Alkan, 1997). Fundamentally, each DynED course is based on sound, time-proven approaches to language teaching, curriculum design, and human interface design (Watt & Foscolos, 1998). It is still being used by English teachers at elementary schools.

The last and the most important project of MONE to integrate ICT into education is the FATIH project (Increasing Opportunities and Improvement of Technology Movement), which was announced in November 2010. It is a joint project of MoNE and Ministry of Transport and Communications. The purpose of the FATIH project is to enable equal opportunities in education and increase the success of the students by using technology effectively in classrooms. FATIH Project proposes that "Smart Class" project is put into practice in all schools around Turkey. In this transformation process, educational econtents are going to be formed in accordance with the current teaching programs. In addition, with this project, it is planned to train teachers about how to use information technologies effectively and efficiently in education (http://fatihprojesi.meb.gov.tr/).

Although these reforms have not been made especially for English language teaching, they have had fruitful affects on English language teaching. In line with these reforms, MONE has renewed English language curriculum of secondary schools in 2011

and English curricula of the primary schools in 2012 and English has been incorporated into the 2<sup>nd</sup> grade of primary schools.

## 2.6. Course Management Systems

Using a course management system (CMS) is a growing practice at institutions of higher education (Kraemer, 2003). Over the last decade, the development of computer software and hardware directed toward education and the teaching and learning process has had tremendous impact on course delivery (Glahn & Gen, 2002; Katz, 2003). Now many schools have their own "course management system" (CMS), sometimes called a "Virtual Learning Environment" (VLE) (Robb, 2004).

Van de Pol (2001) defines a CMS as a computer program that brings web-based automation to many of the administrative aspects of teaching. According to Cole and Foster (2007), CMSs are web applications that they run on a server and are accessed by using a web browser. Morgan (2003) provides a more extensive definition that CMSs are software system, specifically designed and marketed for staff and students to use in teaching and learning and contains common tools such as course content organisation and presentation, communication tools, student assessment tools, grade book tools and functions that manage class materials. Malikowski, Thompson and Theis(2007) characterize a CMS as a comprehensive set of web based tools, some static and some interactive, that supports some or all aspects of course preparation, delivery, communication, participation and interaction. In the view of Carmen and Haefner, (2002), it is as a technology tool that supports and enhances the learning process, while Collis and Boer (2004) describe it as simply a way to help teachers who lack Web design skills to easily create a Web accompaniment to their courses.

Whereas there are some expensive products available such as WebCT or Blackboard, there are also free open source products such as MOODLE and Sakai. Open source means that users have access to the source code of the software. It can be searched under the hood, seen how the software works, tinker with it, share it with others, or use parts of it in your own product (Cole & Foster 2007). Among CMS products, free open source applications have been widely used because they can be obtained free of charge.

These applications can be configured to run on most operating systems. Open source software are developed from contributors worldwide, driven mostly by altruistic values (Baytiyeh & Pfaffman, 2010). Malloy, Jensen, Regan and Reddick (2002) argued that open source courseware was more "flexible, cost effective, and pedagogically promising" (p. 6) due to the freedom of changing the resource code, the options for customizing and controlling the systems.

While CMSs were initially developed to support distance education and online courses, they are now used predominately to complement campus-based classroom courses (Morgan, 2003; West et al., 2006). Ansorge and Bendus (2004) pointed out that students perceived CMS as a helpful tool for their learning process and administrators believed this system was a great investment. Jones and Jones (2005) reported that both faculty and students perceived the CMS as a beneficial tool for student learning and student/faculty communication.

The main advantage of CMSs is that they are designed by the educators so that they are seen as effective tools in learning process (Flood, 2007). These tools help educators to build communities of learners and construct community of knowledge using web-based templates (Gunawardena & McIsaac, 2003). CMSs can reduce the amount of class time devoted to administrative and non-substantive issues, thus allowing the instructor to more efficiently use the limited face-to-face time he or she has with students (Martins & Kellermanns, 2004). Thus, class time can be used for more advanced instruction (Kraemer, 2003), to develop long-term mentoring and to provide constant feedback to students (Merryfield, 2006).

CMSs offer a wide variety of tools that can make courses more effective. They provide an easy way to upload and share materials, hold online discussions and chats, give quizzes and surveys, gather and review assignments, and record grades (Cole & Foster 2007). CMSs also provide access control so only enrolled students can view it. Hoskins and Van Hooff (2005) claims that CMSs make for a very flexible pace of study, provides great security and privacy, and allows rapid feedback in a number of formats.

In addition to these, CMS communication tools provide opportunity for the creation of social networks (Merryfield, 2006). CMSs enable student-instructor collaboration in both synchronous and asynchronous formats, and discussion threads can be archived and retrieved at later dates. In short, they enable instructors to extend the classroom beyond its traditional boundaries of time and space.

There are lots of open source course management tools designed by educators to help tutors giving the lecture or presenting the course materials online. MOODLE can be given as an example for these kinds of course content management systems.

### **2.7. MOODLE**

MOODLE is an open source course management system software which isaimed to help educators to create collaborative, interactive learning environment in order to support their classroom courses (Maikish, 2006). MOODLE was designed to support those who are interested in developing constructivist, student-centered learning environments (Dougiamas & Taylor, 2003). According to Strasser (2011), MOODLE can be seen as an interactive discursive and dynamic learning environment, which allows analyzing and commenting, but mainly for creating and adapting various content with several discursive tools.

MOODLE was originally developed by Martin Dougiamas to help educators create online courses with a focus on interaction and collaborative construction of content (Büchner 2008). The verb MOODLE stands for "Modular Object-Oriented Dynamic Learning Environment". Besides, it describes "the process of lazily meandering through something, doing things as it occurs to you to do them, an enjoyable tinkering that often leads to insight and creativity" (Cole & Foster, 2007).

MOODLE is one of the fastest growing free, open source VLEs, and is also commonly referred to as a LMS or a CMS (Stanford, 2009). MOODLE has been known to be teacher and student friendly due to its ease in usage, downloading, modifying and distribution. According to MOODLE statistics as of 2013 October, there are more than 87

thousand registered MOODLE sites with over 73 million users in more than 230 countries around the world (http://moodle.org/). Cole and Foster (2007) state that universities, community colleges, K–12 schools, businesses and even individual instructors use MOODLE to add technology to their courses.

MOODLE is a versatile course management system that has great potential for language teaching in various formats. Many of the mechanics of classroom operation (assignments, scheduling, quizzes etc.) can be easily set up through "courses". MOODLE also has a broad variety of additional modular features and a relatively quick learning curve helping educators easily and effectively develop full online classes either in advance or as the course is being taught. This versatility allows MOODLE to be used in a variety of ways depending on the needs and capabilities of the school or district: from simple classroom management to pure e-learning or a "blended" combination of the two, with e-learning contentandutilities extending on-site classroom learning (Pieri & Diamantini, 2009).

MOODLE has adopted a social constructivist theory (http://moodle.org/). Cole (2005) states that "Social constructivism is based on the idea that people learn best when they are engaged in a social process of constructing knowledge through the act of constructing an artifact for others" (p. 5). MOODLE, with its emphasis on constructivist and social constructionist approach to education, offers mediating tools which help it to achieve the objectives of a social constructivist-based classroom in many ways. Lots of activities in MOODLE are constructed to allow students to control the shared, common content of courses, such as forums, wikis, glossaries, databases, messaging etc. This stimulates students to share course experience for others. MOODLE has a lots of ways in which people can create representations of their knowledge and share them, for example;

- The course structure itself is an important way to construct a shared representation of the learning "path" that everyone can go through.
- Forums are spaces for discussion and sharing of media and documents (media plug-in filters, attach-ments, hyperlinks).
  - Wikis are outstanding tools for group work and other discussions.

- Glossaries are collaboratively-built "cyclopedias" that can then appear throughout the course.
- Databases allow participants to enter structured media of any type. (Zsolt &István, 2008)

As an open source product, MOODLE is flexible in its customisations, and its use is limited by the knowledge, learning, resources, and innovative spirit of its users rather than by the proprietary rights of vendors (Weber, 2003). Brandl (2005, p. 17) points out that "it has great potential for supporting conventional classroom instruction, for example, to do additional work outside of class, to become the delivery system for blended (or hybrid) course formats, or even to be used as a standalone e-learning platform". According to Eastment (2008), "it allows the teacher to create an environment where instructions, worksheets, videos, forums, and virtually any other e-learning facility you can think of can all be stored together, simply and accessibly" (p. 326). MOODLE supports attractive, explorative and remedial learning owing to the presence of dynamic multi-media and learner-type individualized contents. Therefore, Strasser (2011) declares that it corresponds to the zeitgeist of modern and entertaining learning.

Whereas most CMS systems have been built around tool sets, MOODLE is based on pedagogy. Social constructionism is based on the idea that people learn best when they are engaged in a social process of constructing knowledge through the act of constructing an artefact for others (Cole and Foster, 2007). Therefore, MOODLE supports communication and collaboration between students groups of students and instructors (Gadsdon, 2010). Participants can create and modify curricular contents themselves in order to share them with other members of the virtual environment. Due to this highly collaborative process, group dynamics is supported (Strasser, 2011). Most commercial CMS systems are tool-centered, however MOODLE is learning-centered which appeals to educationalists as well as. Additionally, while other CMSs support a content model that encourages instructors to upload a lot of static content, MOODLE focuses on tools for discussion and sharing artifacts. The focus is not on delivering information it is on sharing ideas and engaging in the construction of knowledge (Büchner, 2008).

MOODLE can appeal to students with different learning styles as it allows for various types of activities and multi-modal input such as video, audio, and text. MOODLE with its didactical tools and constructivist design enables the autonomous learner to work at his/her own pace. Modules such as Quiz and Lesson provide different assessment options and the grade book allows students to receive feedback on their work and keep track of their progress in class. While learners are supported as autonomous learning strategy designers, teachers become coaches or communicative collaborators. Therefore, MOODLE might contribute to a new learning culture supporting continuous lessons with more constructivist features (Strasser, 2011).

MOODLEis not designed specifically for language teaching. However, MOODLE can play an integral part in providing English language students with valuable language experiences. Students learning a new language need as much language support as possible and teachers should offer English language learners a language-rich environment in which students are constantly engaged in language activities (Liaw, 1997). In this regard, English teachers can benefit MOODLE to create an authentic language environment to enable their students use English language. In addition, Meurant (2010) claims that MOODLEhas a special potential in EFL education to promote students' development of L2digital literacy.

# 2.7.1. Philosophy of MOODLE

The most important feature that makes MOODLE popular among educators is to have a pedagogy called social constructionist pedagogy (http://moodle.org/). The social constructionist philosophy believes that people learn best when they interact with the learning material, construct new material for others, and interact with other students about the material (Rice, 2008). This style of learning and teaching is based upon four concepts: constructivism, constructionism, social constructivism and the concept of 'Connected & Separated' (http://moodle.org/).

Relying on constructivism, constructivist, social constructivist and other learning theories MOODLE puts its emphasis on the mutual cooperation and communication in

teaching and learning activities in the scenario of informatisation, the students complete the information construction according to their existing knowledge and experience.

### 2.7.1.1. Constructivism

Constructivism is a theory of learning which posits that students learn by actively constructing their own knowledge (Duffy & Cunningham, 1996). Constructivism is a learning theory that focuses on learning as a cognitive process, in which knowledge is expanded on the basis of learners interactively using their prior knowledge and new information in order to generate new knowledge (Rüschoff, 2009).

Constructivism is based on the assumption that people creates meaning instead of acquiring it (Ertmer & Newby, 1993). Constructivist theories focused on the process of learning and construction of understandings. According to constructivism, "learning is an active process of constructing rather than acquiring knowledge and instruction is a process of supporting that construction rather than communicating knowledge" (Duffy & Cunningham, 1996, p 171). Wilson (as cited in Lefoe 1998, p. 456) describes a constructivist learning environment as "a place where learners may work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem-solving activities" (p. 5). According to Duffy and Cunningham, constructivist learning environments (1996, p. 171);

- ❖ Provide experience for the students in their knowledge construction process
- Provide experiences that includes multiple perspectives
- Provide realistic and relevant contexts
- Encourage ownership in the learning process
- ❖ Provide opportunities for learning through social experience
- Provide multiple modes of representation
- ❖ Encourage self-awareness during the knowledge construction process

The constructivist classroom is learner-centred(Gray, 1997). The learners are involved in the ongoing process of "checking new information against old rules and then

revising the rules when they no longer work" (Slavin, 2006, p. 243). A constructivist perspective views learners as actively engaged in making meaning, and teaching with that approach looks for what students can analyse, investigate, collaborate, share, build and generate based on what they already know, rather than what facts, skills, and processes they can parrot (Dougiamas, 1998). Constructivism rejects the traditional role of teacher as demagogue and supports the idea that for effective learning the instructor must act as a facilitator (Perkins, 1999).

### 2.7.1.2. Constructionism

Constructionism is a theoretical framework that comes out of the work of Papert in the research and development of the Logo programming language (Papert, 1980). Constructionism builds on constructivism in that it distinguishes itself from more traditional instruction, in part, by the degree of active learner engagement as well as the assumption that learners have the ability to create meaning, understanding, and knowledge. Papert (1991, p. 1) states that:

"Constructionism—the N word as opposed to the V word—shares constructivism's view of learning as "building knowledge structures" through progressive internalization of actions... It then adds the idea that this happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sand castle on the beach or a theory of the universe."

### 2.7.1.3 Social Constructivism

Social constructivism is a closely related set of ideas that focus on the individual development of meaning through communication and the active construction and sharing of social artefacts, including texts rather than receiving them passively from the environment (Dougiamas, 2000).

Social constructivism emphasises the social side of the process of knowledge construction. Roberts (1998) points out that "constructivist theory is framed essentially in terms of individuals, however, (...) each person's development occurs in constant exchange

with their social circumstances" (p. 44). It suggests that learners add to and reshape their mental models of reality through social collaboration, building new understandings as they actively engage in learning experiences.

Social constructivism supports role sharing and enables each participant to be a teacher as well as a learner (Pan &Bonk, 2007). Within a social constructivist environment, students not only learn from their teachers but also from their peers through collaboration and reflection on these experiences. Gruba (2004, p. 3) states that "Social constructivists promote close ties between authentic activities, collaborative learning, a variety of materials, the student ownership of outcomes and critical reflection".

## 2.7.1.4. Connected and Separate

This idea is explained in the official website MOODLE (http://MOODLE.org/) as follows:

- ◆ Separate behaviour is when someone tries to remain 'objective' and 'factual', and tends to defend their own ideas using logic to find holes in their opponent's ideas.
- ◆ Connected behaviour is a more empathic approach that accepts subjectivity, trying to listen and ask questions in an effort to understand the other point of view.
- ◆ Constructed behaviour is when a person is sensitive to both of these approaches and is able to choose either of them as appropriate to the current situation.

In general, a healthy amount of connected behaviour within a learning community is a very powerful stimulant for learning, not only bringing people closer together but promoting deeper reflection and re-examination of their existing beliefs.

## **CHAPTER THREE**

### 3. METHODOLOGY

### 3.1. Introduction

This chapter provides information regarding the methodological approach followed in this study and research design including the participants, the setting, the data collection tools, the piloting of the study and the data analysis procedures.

The mixed-method approach was chosen as the methodology of this research. Mixed-method research was defined by Creswell (2003) as "the collection or analysis of both quantitative and qualitative data in a single study in which the data is collected concurrently or sequentially, are then given a priority, and thus involve the integration of the data at one or more stages in the process of research" (p. 212).

Various advantages of the mixed-method approach have been identified (Johnson & Onwuegbuzie, 2004; Wright, 1999). It enables the researchers to draw on all possibilities (Tashakkori & Teddlie, 1998) and provides a broader perspective to the study as the qualitative data helps describe aspects the quantitative data cannot address (Creswell, 2003).

## 3.2. Participants

A total of 44 students participated in the study (as displayed in Table 3) ranging in age from 16 to 18 selected on the basis of convenience sample technique. This kind of sampling involves choosing the participants who are readily available (Mertens, 2005). Therefore, the participants in this study were chosen from 11th grade students in Lüleburgaz High School where the researcher is employed as an English teacher.

At the beginning of the study, the participants were interviewed and only those who had no previous experience using MOODLE or any other course management system (CMS) were allowed to participate. The students were divided into control and experimental groups according to the means of 1st term English exam scores. The students whose mean of 1st term English exam scores wassimilar were put into the same group. Therefore, it is assumed that English level of the students was the same.

In this study, the control group consisted of 22 students, 10 of whom were female and 12 male. The experimental group consisted of 22 students with 12 females and 10 males. Table 3 figures sex profile of participants.

**Table 3: Sex Profile of Participants** 

Groups	Male	Female	Total
Experimental	10	12	22
Control	12	10	22

## 3.3. Setting

The study was conducted in Lüleburgaz High School, an Anatolian High School which admits their students according to their SBS (the National High School Entrance Exam scores). As in all state schools, Lüleburgaz High School follows the curriculum defined and formed by the Turkish Ministry of National Education (MONE) and the course books supplied by the MONE are used. There are 6 hours of English a week for 9<sup>th</sup> grade students and 4 hours for 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade students.

The school is equipped with an interactive board in each class and in three laboratories - biology, physics and chemistry. Thus, students can gain access to the Internet easily. Students also have access to the computer and the Internet at the school library.

# 3.4. Design of the Study

The aim of this study is to investigate Turkish high school students' attitudes towards the use of MOODLE in ELT blended instruction. The study also intends to find out whether the use of MOODLE in English lessons as a tool for blended instruction makes a significant difference to the achievement of students.

The quantitative data was collected through a questionnaire administered at the end of the treatment and through exam results that were carried out routinely during the second term. The qualitative data was obtained through semi-structured interviews conducted with randomly selected students among the experimental group.

Both the control group and the experimental group were selected by convenience sampling technique. The rationale for selecting this technique was through the availability of naturally formed groups (Creswell, 1994). The experimental study lasted 15 weeks and the experimential group consisted of 22 students who were in 11<sup>th</sup> grade class. The control group also consisted of 22 students who were in another 11th grade class. Both the students in the experimential and control group had 4 hours of English a week and were taught by the same teacher. Both of the groups used the same course book named "New Bridge to Success for 11th Grade". In Lüleburgaz High School where this study was conducted, all of the classes at the same grade have the same exam at the same time. Therefore, both the experimental group and the control group had three routine English exams with the same questions at the same time. After a fifteen-week treatment, a questionnaire was administered to the experimental group to elicit their opinions on the use of MOODLE in English lessons as a supporting tool and a semi-structured interview was conducted to get deeper insights into the students' experience with studying English with MOODLE during the second semester. In addition to these, all students in both groups had three routine exams during the second semester. At the end of the second semester, three exam results of the experimental group were compared with the exam results of the control group in the second semester so as to identify whether the use of MOODLE affects the success of students in English lesson or not. Table 4 demonstrates overall research design.

**Table 4: Overall Research Design** 

Research Design	Mixed-method; qualitative and quantitative		
Sampling Strategy	Convenience Sampling		
Participants	44 high school students (experimental group-22 students, control group-22 students)		
Data Collection Tools	<ul> <li>≜ Exam Results</li> <li>♣ Questionnaire</li> <li>≜ Semi-structured Interview</li> </ul>		
Data Analysis	Quantitative-qualitative		
Time and Duration	15 weeks (17th February-1st June 2012)		

### 3.5. Procedure

The experimental study started on 17th February, and endedon 1st June, 2012. This was a blended learning study including the supporting activities in accordance with the 11<sup>th</sup> Grade English Curriculum of the Turkish Ministry of National Education on MOODLE, a free course management system. Each week, the researcher uploaded the reading texts, the listening and the short video segments and the slide shows related to the lesson content. Quizzes via Hot Potatoes quiz software were also applied in order to assess students' comprehension level (See Figures 45, 46, 47, 48 and 49). In addition, students shared slide shows, listening materials and videos. They could chat and send e-mails to the teacher and the other students on the same students. Students regularly uploaded their written homework given by the researcher under the writing section and the teacher gave feedback to the students' written works (See Figure 31). All students could see each other's works as well as the feedback supplied by the teacher. Thus, they had the opportunity to do selfassessment. Besides routine written homework, students worked on collaborative writing activities such as story and film script writing in groups. Throughout the semester, the researcher served as a facilitator providing technical support by responding to students' questions both face to face at school and on MOODLE via chat or message system about how to create their accounts, how to load their files and slides on MOODLE, how to use chat and message system, and so on.

The data was collected in two stages. In stage one, at the end of the fifteen-week treatment, a questionnaire was conducted with the experimental group to find out their attitudes towards MOODLE and their opinions about integrating MOODLE into English lessons. The questionnaire was in the native language of the participants. The questionnaire was delivered to the experimental group in the classroom and it took the students about 30 minutes to finish answering the questions in the questionnaire.

In stage two, a random sample of 10 students from the experimental group were interviewed to gain a deeper insight about their experience with MOODLE. All the participants in the interview section declared their consent to participate. The interviews lasted between 7-15 minutes long and all were video-recorded in order to gather accurate information.

#### 3.6. Data Collection Instruments

In this study, both qualitative and quantitative data collection methods were employed. A questionnaire and semi-structured interviews were conducted. In addition to these, the first and second semester exam results for the experimental group as well as the second semester exam results for the control and experimental group were compared.

## 3.6.1. Exams

In order to identify whether using MOODLE in English lessons as a blended-learning method makes a significant difference in the achievement of students in English lessons or not, the English exam scores of the students both in the experimental group and the control group were compared.

In Anatolian high schools, students have three exams for English lessons in each semester. In Lüleburgaz High School, all of the classes at the same grade have the same exam at the same time. Therefore, both the experimental group and the control group had three routine English exams with the same questions at the same time. The first exam was

held on 7<sup>th</sup> March, the second exam was carried out on 25<sup>th</sup> April, and the third exam was executed on 29<sup>th</sup> May.

# 3.6.2 Questionnaire

The main aim of this study is to elicit EFL learners' opinions about MOODLE and their attitudes towards the activities on MOODLE. In order to collect data, a questionnaire was conducted.

A large amount of data can be collected quickly and economically from a large sample with the help of questionnaires (O'Maley &Chamot, 1990; Krathwohl, 1998; Dörnyei, 2003). Therefore, questionnaires are a commonly-used data collection instrument in social studies.

The items in the questionnaire were prepared according to previous research studies in this field. The items in the second part of the questionnaire (See Appendix II) were adapted from two studies by Arslan (2009) and Aydın (2011). The questionnaire was checked by two experts in Turkish Language prior to delivering to the students.

The questionnaire involved open-ended questions, closed-ended questions and questions in a Likert-scale format (See Appendix I). They were composed of three main parts as outlined in Table 5. The first part of the questionnaire consisted of questions that dealt with participants' background, computer and internet experience, and MOODLE use frequency.

The second part of the questionnaire inquired about students' attitudes towards using MOODLE for blended English instruction. In the second section, likert-scale items with five points (strongly agree, agree, no opinion, disagree and strongly disagree) were used for responses.

The last part consisted of one open-ended question asking for students' suggestions on the activities on MOODLE and five closed-ended questions with a 'yes', 'no' or

'undecided' response which aimed at eliciting students' opinions about using MOODLE in English lessons as a blended instruction tool.

**Table 5: Distribution of Questions on the Questionnaire** 

Sections	Section I	Section II	Section III
<b>Question Types</b>	Background	General Attitudes Towards	<b>Suggestions and Opinions</b>
	Information	Using MOODLE in English	about MOODLE
		Lessons	
Number of	9	31	6
Questions			

### 3.6.3 Interview

Semi-structured interviews, with 10 participants from the experimental group, were conducted (See Appendix II). According to Merriam (1998), semi-structured interviews "are guided by a list of questions or issues to be explored, but neither the exact wording nor the order of the questions is determined ahead of time" (p.74).

One of the main reasons for the selection of semi-structured face-to-face interviews as the data collection instrument is that they fit best when the research purpose is to understand the meaning of the experiences of the people involved in education (Kvale, 1996; Seidman, 2005). Moreover, according to Krathwohl (1998) when the research questions are pre-planned in nature, rather than emergent ones, more structured interviews suit better as data collection tools.

The interviewees were selected using random sampling procedures. All the names of the students in the experimental group were written on pieces of paper and put into a bag. Then, the researcher took out the pieces of paper one by one in front of the class and nominated 10 students as interviewees. In random sampling, all possible samples of a given size have an equal opportunity of being selected (Krathwohl, 1998). The interviews were conducted in the guidance counselor's room at the school because it was the most silent and peaceful place in the school.

The participants were interviewed one by one. In order to prevent language related constraints, the interviews were conducted in Turkish, the native language of the interviewees. Also, in this way, it is thought that much deeper and more revealing responses from participants could be obtained. The interviews were video-recorded with the permission of the interviewees and later transcribed for content analysis.

# 3.7. Pilot Study

A pilot study was conducted to see ambiguities, poorly worded questions and statements which were not fully understood by the students. A pilot study assists researchers in identifying problematic items, clarifying needs of research design, and saving both time and money for the study (Light, Singer and Willett, 1990).

The pilot study of the questionnaire and the interviews were conducted with a different class at the same grade as the experimental group. Because respondents in pilot studies should be much like those in the main enquiry (Oppenheim, 1992). The students were informed about the purpose of the study prior to taking the questionnaire and inteview. The students in the pilot study were asked if they had any difficulty in understanding the statements both in the questionnaire and the interview.

The questionnaire and interview questions were developed in Turkish and two experts in Turkish language checked and revised questions in Turkish. There were two ambiguous questions identified by the experts. After the necessary changes, the final Turkish version was piloted in the classroom. The students agreed that the statements in the questionnaire and interview were understandable and clear.

In the light of the piloting study, the last version of the questionnaire with 46 statements and the last version of the interview with 15 statements were administered in the actual research setting. The participants who took part in the pilot study were not involved in the actual study.

# 3.8. The Implementation of the Study

Integrating the four main language skills (listening, reading, speaking, and writing) is very beneficial in the second language classroom as the language use is holistic in the real world (Schurr et al., 1995). Skill integration allows for growth in all main skill areas at the same time. Thus, students are able to use their strengths in order to help them grow in their weaknesses. Therefore, all the four skills were integrated into the study.

The Czech gymnazium's MOODLE system was used for this study. The reasons for using this system were that it was already settled and used system in this gymnazium. Also they allowed me to use it and assigned me as one of the administrators for the course titled "Hi! How are you doing?". There were five high schools from France, Slovakia and Sweden besides a Czech gymnazium on the same system. Thus, it also allowed students to chat and meet new friends from other countries on the same system. This motivated them MOODLE. The conducted **URL** study was the to use on http://moodle.gymnaziumrajec.cz/. In Figure 1, a view from the Lüleburgaz High School Section is displayed and a view from sections of the Slovakian and French schools is shown in Figure 2.

Figure 1: A View from Lüleburgaz High School Section



Figure 2: A View from Sections of Slovakia and French Schools



The course was organized using blended learning concept, where traditional teaching methods are combined with activities and resources presented through MOODLE. Prior to the online course, the students were given a tutorial to give information about the study and MOODLE. As it was part of the tutorial objectives, they were also shown how to enroll and how to use MOODLE. During the study, the students were asked to do various tasks in order to get used to learning English with the software. The course activities included actions related with contents such as presentations, reading, vocabulary, listening, speaking, writing and video exercises, online Hot Potatoes quizzes (multiple-choice, truefalse, jumbled-sentence, crossword, matching/ordering and gap-fill exercises) and homework. These activities enabled students to learn and study the themes taught when they were absent. All important dates, deadlines and activities were also announced on the course (See Figures 12 and 13). Both students and the researcher could follow the activities on MOODLE by the sections of recent activity, latest news and upcoming events (See Figure 3).

Figure 3: Sections of Upcoming Events, Latest News and Recent Activity



MOODLE is an open source course where the instructor can design and tailor the course tools according to the students' needs and course requirements. Therefore, despite a lot of features in MOODLE, the researcher used only forum, glossary, Hot Potatoes quizzes, chat, resource and wiki features (See Figure 4). Because these features were enough to meet the requirements of English courses which the researcher instructed. The researcher followed a gradual process in this study. As students gained experience with MOODLE, a new activity was then added by the researcher.

Figure 4: Activities Used in the Study



The students received help, not only from the teacher, but also from their peers as to how to do the tasks and use MOODLE during this process. The problems encountered were explained and discussed in Turkish, the native language of the students.

### 3.8.1 Enrollment

The first task of the students was to create an account and to enroll for the course. Althoughit is possible for the researcher to create accounts and enroll students herself, the researcher chose email-based self-registration. The students were given the URL and course key. Then, they registered themselves and created their profile.

The account creation process involved the student filling in and submitting an initial account creation form (See Figure 5), then validating it by responding to a confirmation email to activate their accounts (See Figure 6). After enrollment, students created their profiles (See Figure 7). Enrollment in the online course was compulsory and students were informed that they were going to get fifty percent of their oral mark for using MOODLE.

New account

Choose your username and password

Username\*
Password\*

Unmask

More details

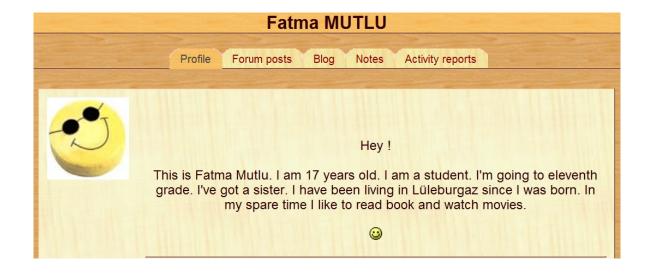
Email address\*
Email (again)\*
First name\*
Surname\*
City/town\*
Country\*
Turkcy

**Figure 5: New Account Form** 

Figure 6: The Enrolment Key that the Course Requires for Login



Figure 7: Example of the Students' Profiles



### **3.8.2 Forums**

Forumsare the central organizing feature in the social course format. Teacher and students can post messages to each other while easily keeping track of individual messages.

In this study, forums were used to form sections for various topics, for example; homework, listening, reading etc...

## 3.8.2.1. 'Things that We're Interested in' Section

After the enrollment, the second task of the students was to ask and answer about the things that they are interested in, for example; their hobbies, computer games, music, films etc.(See Figures 8 and 9). They posted their questions, answers and comments to both their classmates and foreign students (See Figure 10). Thus, they got information about their hobbies, lifestyles, culture and customs. The system supplies information about the threads so everyone can see who wrote the question and who replied to it.

Figure 8: Example of the Questions by a Swedish Student and Answers Given by

Turkish and Other Students



Figure 9: Example of the Questions by a Turkish Student and Answers Given by Turkish and Other Students



Figure 10: Example of the Answers Given by Foreign Students



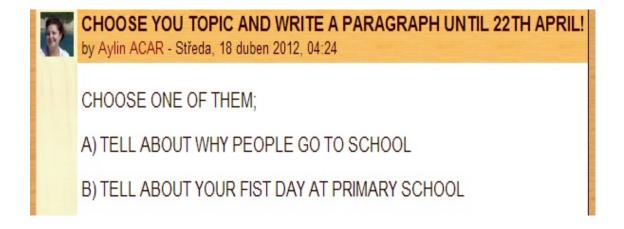
### 3.8.2.2 Homework Section

90% of the participants had internet connection at home. Therefore, homework section (See Figure 11) was formed by the researcher to inform the students of what to do before coming to the lesson and learn their homework even if they were absent from school (See Figure 12).

Figure 11: Forum Page for Homework Section

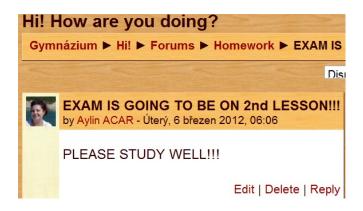


Figure 12: Example of Homework



Some announcements were also made by the teacher using the forum module (See Figure 13).

Figure 13: Example of Announcements Made by the Researcher



### 3.8.2.3. Presentations Section

Students had to choose a topic that meets lesson goals, prepare a slide show and present it orally to the class at least once a term in the English lesson. They got twenty-five percent of their oral mark. After their presentation in the class, students were asked to upload their work under 'Presentations Section' (See Figure 14) to give opportunities to the other students who were absent from school that day or who were from foreign countries to see their study. Students tried to do their best because they did not want to be ashamed of other students, especially the students from other countries.

Figure 14: Forum Page for Presentations Section



Students should download the file on their own computers in order to watch the presentations (See Figure 15). Because this type of MOODLE does not supply the feature to watch slides shows on the system.

Figure 15: Example of the Presentations Loaded by the Students



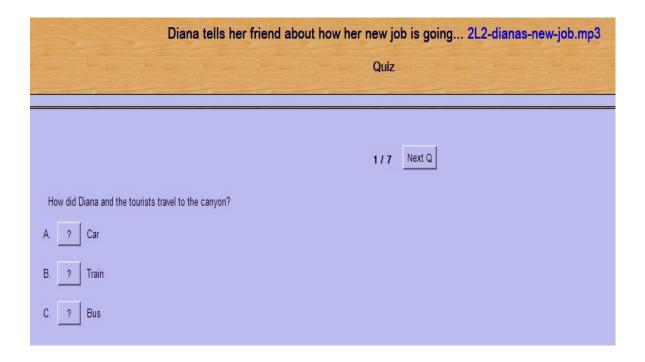
# 3.8.2.4. Listening and Speaking Section

Listening activities such as songs and dialogues in MOODLE (See Figure 16) gave students the opportunity to listen to the recordings repeatedly until they felt comfortable with them (Stanford, 2009). Also, the students were able to practice them whenever and wherever they wanted. Most of the listening activities were accompanied with a Hot Potatoes quiz whose results were received by the researcher (See Figure 17). Evaluated automatically by the system, the scores were accessible to the teacher and the testing student.

Figure 16:Forum Page for Listening and Speaking Section



Figure 17:Example of Hot Potatoes Listening Multiple-choice Quiz



Students also uploaded the songs accompanied with their presentations under this section so that every students could listen these songs whenever and whereever they wanted (See Figure 18).

Figure 18: Sample of the Songs Loaded by the Students



In addition to listening materials, the researcher also uploaded sample dialogues and role-plays related to the topic presented in the course book in order to give students ideas to make their own dialogues or role-plays (See Figure 19). Besides the researcher, students posted their own dialogues (See Figure 20).

Figure 19: Example of Sample Dialogues in Listening and Speaking Section

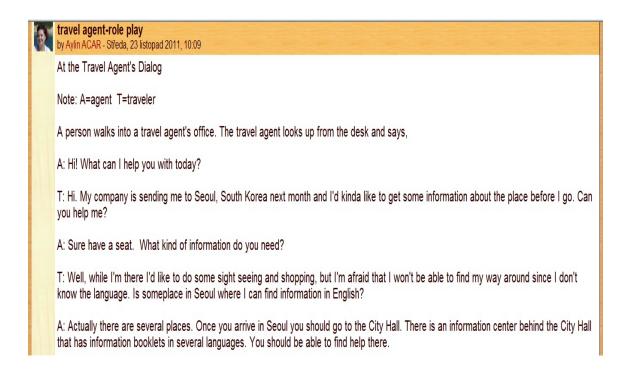
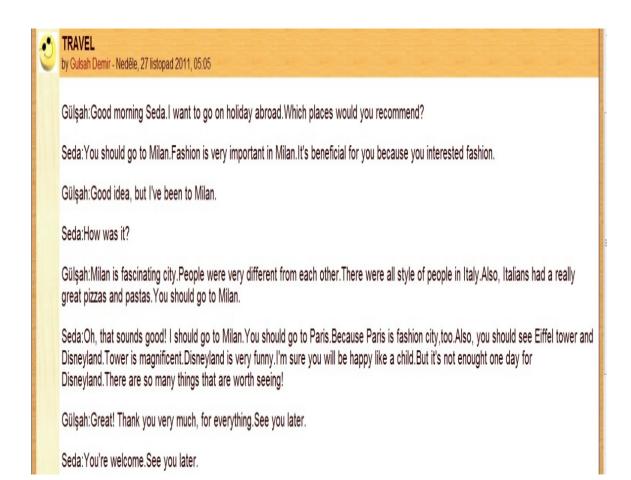


Figure 20: A Sample of Dialogues Posted by the Students



### 3.8.2.5. Video Materials Section

In order to supply authentic and visual language materials, a video section was added (See Figure 21). Besides the researcher, students could upload videos on the course (See Figure 22). Students had to download video materials on their own computers in order to watch them as well as slide shows. Because, this type of MOODLE does not supply the feature to watch videos on the system. Some video activities were accompanied with a Hot Potatoes quiz (See Figure 23). The scores of these quizzes were accessible to the teacher and the testing student.

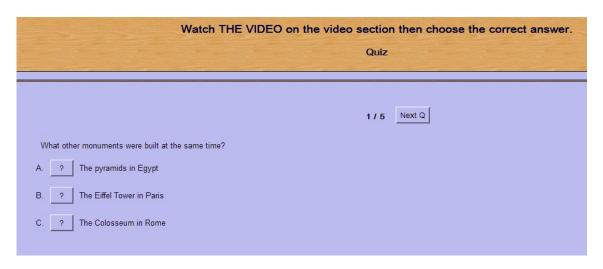
Figure 21: Forum Page for Video Materials



Figure 22: Example of Videos Loaded by the Teacher



Figure 23: Example of Hot Potatoes Video Multiple-choice Quiz



# 3.8.2.6. Reading and Vocabulary Section

Reading and vocabulary are a must in language teaching. Therefore, a section was assigned for reading and vocabulary. Reading texts and vocabulary items related to the content of the units in the course book were uploaded under the 'Reading and Vocabulary Section' by the researcher and the students (See Figure 24). Students could read the texts and study vocabulary on MOODLE (See Figures 25 and 26). Students also took Hot Potatoes quizzes related to reading and vocabulary (See Figures 27 and 28). Both the researcher and the testing student had access to the scores which were automatically evaluated by the system.

Hi! How are you doing?

Gymnázium ▶ Hi! ▶ Forums ▶ Reading and Vocabulary

This forum allows everyone to choose whether to subscribe or not Showledit current subscribers Unsubscribe from this forum

You can post here any interesting reading material you have found. You can also comment on what have been posted.

Add a new discussion topic

Add a new discussion topic

Reading with Comparative Adjectives

Aylin ACAR

Aylin ACAR

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Figure 24: Forum page for Reading and Vocabulary Section

Figure 25: Example of Reading Texts Loaded by the Reasearcher

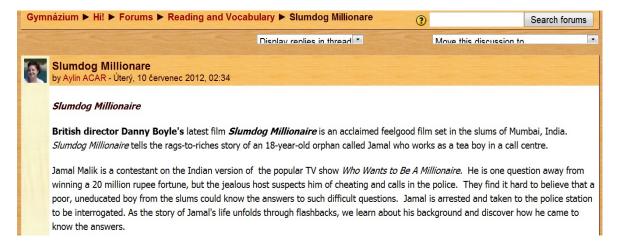


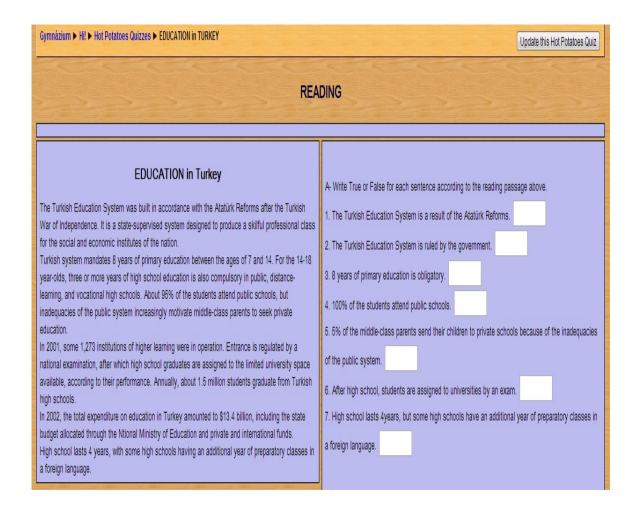
Figure 26: Sample of Vocabulary Activities Loaded by the Students

Gymr	Gymnázium ▶ Hi! ▶ Forums ▶ Reading and Vocabulary ▶ Decide which free time activities are being mentioned.					
	<b>.</b>	Search forums				
	Display replies in threaded f	n to 🔻				
	Decide which free time activities are being mentioned. by Tayyip Taşdelen - Čtvrtek, 29 prosinec 2011, 06:54					
	1. The lights go down and the muffled sound of munching popcorn is barely audible under the sounds of the opening soundtrack.()  2. Standing on the board to ride on the waves is fast and exciting. It's probably a goog way to keep fit. A love for adventure and lots of energy.()  3. She won all her matches this season, which is a best ever performance.()  4. In the first period the score was 10-35. Do you think the visitors will win the game.()					
		Edit   Delete   Reply				

Figure 27: Example of Hot Potatoes Vocabulary Gap-fill Quiz



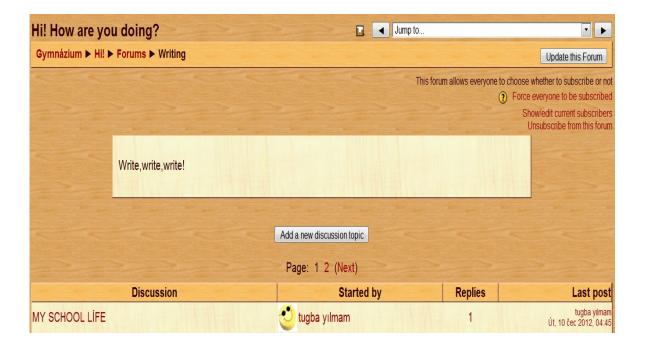
Figure 28: Example of Hot Potatoes Reading Short-answer Quiz



### 3.8.2.7. Writing Section

As writing skills are as important as other language skills, a section for writing was also added. EFL learners' success in English writing brings them benefits not solely in their English learning but also in their life-long careers (Glazier, 1994). Whereas classroom writing is an essential academic requirement, writing outside the classroom can be a usefultool to enhance writing skills (Chanderasegaran, 2002). Students can have an audience other than the teacher with sustained motivation (Kayaoğlu, 2008, 2009).

Figure 29: Forum Page for Writing Section



Normally, the students used to write paragraphs or essays about the topics in the course book, but it was very hard to provide feedback for all of them for the researcher. Sometimes the researcher used to have the students read their written work in the classroom, but it took lots of class time and all the students could not have chance to read their writing. So, most of their writing works could not get feedback. In addition, the other students could not generally see or comment on their peers' writing. However, the use of MOODLE changed this procedure. Students had to post each written homework to the writing section (See Figure 30), and this enabled the researcher to give feedback and correct the mistakes (See Figure 31). Students could see and make comments on each other's written works. The written works acted as a model for less successful students to write a new one. In addition to these, students could see their mistakes and the other's editted works whenever they wanted because all students written works were saved by the system. It also gave the researcher the opportunity to follow the students' study and progress.

Figure 30: Sample of the Written Homework Posted by the Students

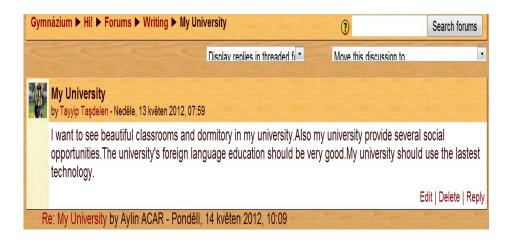


Figure 31: Example of the Feedback Given by the Researcher to the Students' Works

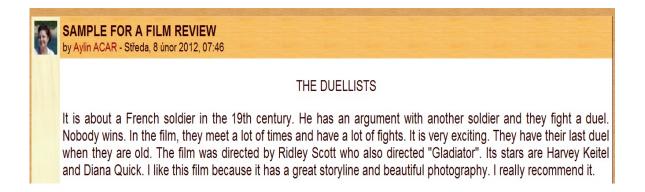


The researcher also uploaded guides to show the students how to write and posted sample paragraphs in order to promote the students' written works (See Figures 32 and 33).

Figure 32: Example of Outlines Supplied by the Researcher



Figure 33: Example of Sample Paragraphs Supplied by the Researcher



### 3.8.2.8. Grammar Section

As grammar is an indispensible part in language teaching, a section for grammar was added(See Figure 34). The students could study grammar items and do exercises or quizzes (See Figures 35, 36 and 47) whenever they wanted and this made them feel more relaxed.

Figure 34: Forum Page for Grammar Section



The slide shows used in the classroom by the researcher to introduce a new grammar item were uploaded under the grammar section so that the students could download and study whenever they wanted (See Figure 35). It was very useful, especially for the students who were absent from school that day. Grammar items were also

accompanied with a Hot Potatoes quiz whose results were received by the researcher and the testing student (See Figure 36).

Figure 35: Example of Grammar Slide Shows Supplied by the Researcher



Figure 36: Example of Hot Potatoes Grammar Multiple-choice Quiz



### **3.8.3. Glossary**

Another task for the students was to build a dictionary for their own class using the Glossary module. The students who were assigned by the researcher were asked to add newly learned vocabulary items, to edit and comment on them when necessary. Thus, the

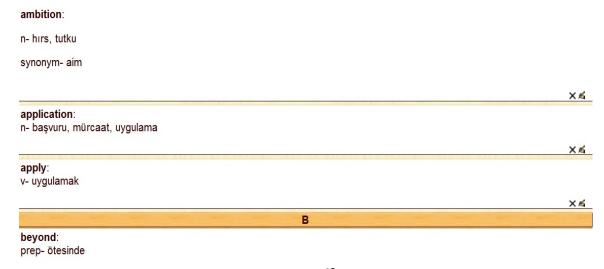
participants had a dictionary of their own set up with their collaborative efforts. At the end of the study, the students formed a glossary of three units for the course book used in the classroom (See Figure 37). By the help of this dictionary, the students could access the new words together with its meaning used in the unit and did not have to look up the dictionary for each word. They could also export the glossary for each unit to print if they wanted. The students declared that they benefited from this section especially, while studying for the exam.

Figure 37: Page for Glossaries

you doing? Hi! ► Glossaries		.limn to
Topic	Name	Entries
2	UNIT 11 WORDS	97
	UNIT 10 WORDS	81
	UNIT 9 WORDS	94

Students also supplied the synonyms and antonyms while defining the words into Turkish (See Figure 38).

Figure 38: Example of Dictionaries Formed by the Students



### 3.8.4. Messaging

Communication between teachers and students, students and students are very important, especially while working on a new subject and using a new tool in order to overcome possible problems and share ideas. Students communicated with the researcher and their classmates or foreign students in two ways. One way was messaging (See Figure 39). It was very useful especially when a student did not want to ask a question in the classroom or chat.

Büşra YURDUSEVEN

Profile Forum posts Blog Notes Activity reports

Hi My name is Büşra. I'm 16 years old.

City/town: lüleburgaz
Email address: ergene57@hotmail.com ☑
Courses: Hi! How are you doing?

Last access: Úterý, 5 červen 2012, 10:32 (36 days 15 hours)
Roles: Student

Unenrol me from Hi! Send message

Figure 39: Sending a Message

### 3.8.5. Chat

The other means of communication was chat (See Figure 40). The use of chat was another example of the social constructivist tools in MOODLE which provides opportunities for interaction and collaboration among the students. Chat in MOODLE allowed the participants to have a real-time synchronous text messaging repeated on a set date outside the normal class hours.

Figure 40: Page for Chat



### 3.8.6. Wiki

Wiki is a piece of server software that allows users to freely create and edit Web page content using any Web browser (http://wiki.org/). Wiki was used as a social constructivist tool in this study (See Figure 41). The researcher divided the class into groups and had each group work on the writing task (See Figure 42). Using the wiki module, each student in the group was able to contribute and edit the content plus delete the errors and unnecessary material on their work. The work was created collaboratively by the individuals and it belonged to the whole group. Students widely collaborated on group projects using wikis and this way develops not only their language skills but also their thinking skills.

Figure 41: Wiki Activities in the Study

```
Story: What's Going On Here?

DISCUSSION

STORY GROUP 1

STORY GROUP 2

STORY GROUP 3

COLLABORATIVE STORY WRITING GROUP 1

COLLABORATIVE STORY WRITING GROUP 2

COLLABORATIVE STORY WRITING GROUP 3
```

Figure 42: Example of Collective Story Writing Group Works

### **COLLECTIVE STORY WRITING GROUP 2**

Scene 1... one day, they are having class during the morning, when the bell is ringing, one guy comes out from the class door, wearing his sunglasses, putting on his cool business suit. No one focuses on him, because no one knows he is a young James Bond, he hid his head into the dark, suddenly, turning around his face, showing his classic action---getting a gun to shoot the blooding screen.

Scene 2... Everyone started escaping with screams. James hid himself because he saw the employee with gun.

Scene 3... James was there for Trevor. He had thought that mission would be easy. But, it wasn't.

Scene 4... Trevor was a very clever students. Despite his age, he had invented several important things for humanity. But, these things can be used for wicked ideas by evil powers.

Scene 5... James Bond got a denunciation. He came to school for taking away Trevor to use him for government secret plans.

Although most of the wiki activities were group-work, the last two wiki activities were whole-class-work. In discussion wiki, students were asked some probing questions to get their opinions on education systems and university entrance exams in Turkey (See Figure 43). The other whole-class-work was again a story writing activity but this time, each student created his/her own short story about a picture uploaded by the researcher (See Figure 44).

Figure 43: The Probing Questions Asked by the Researcher and the Answers Posted by the Students in Wiki "Discussion"

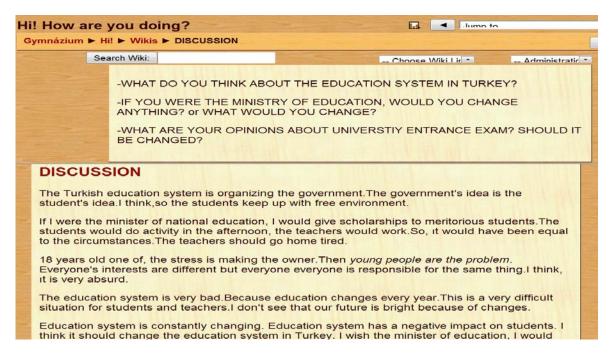


Figure 44: The Whole-class Wiki Story Writing

What do these boys see? How do they feel? Write a story to go with this picture.



### 2boys.jpg

David and Michael are two brothers. The weather is nice, therefore two brothers went to the park. But something unexpected happened in the park. Two brothers sat bank in the park. Two brothers, felt pain her leg. Two brother saw the bee bite their legs. Two brothers began to shout.

Mertcan and Alican twin brothers. They decided to go to funfair and from their mothers had taken the money, they went funfair. They were very amused together with other friends at funfair and played clowns.

Ali and Veli comes out to play ball a day. They're playing ball is too happy. But Ali accidentally throws the ball in a glass house and the glass breaks. The host is annoyed, the event will grow and receive calls his father. His father angry with to Ali. Most growth in the event closes Two brothers began to shout.

The weather is very hot John and Reniamin decided to eating cream. John was chosen strawherny

### 3.8.7. Hot Potatoes Quizzes

During the study, Hot Potatoes software was applied for creating various quizzes by the researcher. A suite of Hot Potatoes exercises (multiple-choice, true-false, matching, crossword, gap-filling) was used to revise and refresh the grammar structures, vocabulary and topics of New Bridge to Success for 11<sup>th</sup> Grade, the course book used in the class (See Figures 45, 46, 47, 48 and 49). The quizzes were created on the researcher's computer and then uploaded to the MOODLE course.

Hot Potatoes exercises were enhanced with media objects such as video and audio links so that they became more appealing to the students (See Figures 45 and 46).

Figure 45: Example of Listening Gap-fill Exercise



Figure 46: Example of Video Multiple-choice Quiz



Figure 47: Example of Grammar Match Exercise

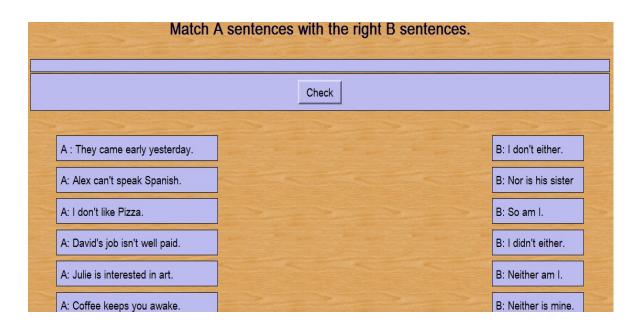
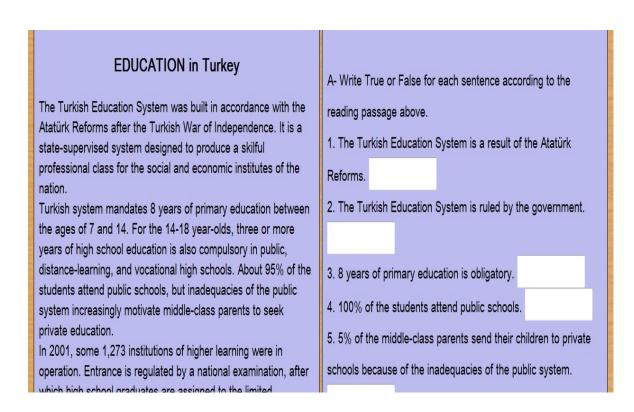
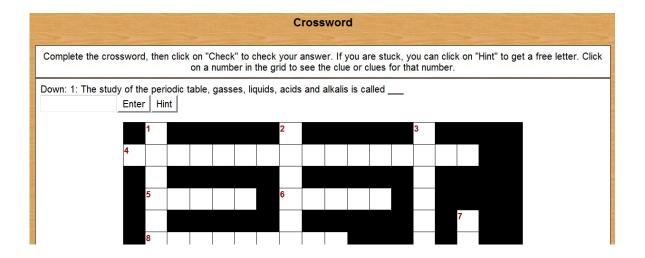


Figure 48: Example of Reading True-false Exercise



Using Hot Potatoes software, the researcher created crosswords. Crosswords were made as a fun form of testing students' knowledge (See Figure 49).

Figure 49: Example of Crossword Exercise Related to School Subjects



### 3.9. Data Analysis Procedure

This study collected both qualitative and quantitative data. Statistical Package for Social Sciences (SPSS v.16.0) was used to analyze the quantitative data which was obtained from the questionnaire. Descriptive statistics, such as mean, percentage, and standard deviation of each item, were used. The numerical data which was obtained through the exam scores was also entered into SPSS program on the computer. Paired samples T-test was used to see whether there were any significant differences between the exam scores of the two groups. In order to test non-normal distributions, Mann-Whitney U-Test was applied. All the results were displayed in tables. The qualitative data which was gathered through the interviews was analyzed by categorizing the main considerations. These categories were determined according to the content of the interview questions, research questions and common responses raised by the participants.

### **CHAPTER FOUR**

### 4. FINDINGS AND DISCUSSION

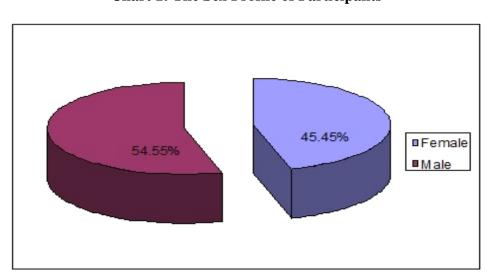
### 4.1. Introduction

This chapter deals with the findings, analysis of the data, and the discussion of the results. In this study, both qualitative and quantitative analysis techniques were used.

Quantitative data comes from the exam results and the questionnaire. The data obtained from the exam results and the questionnaire was analyzed using SPSS (v.16.0). In addition, paired samples T-test and Mann-Whitney U-test were applied. Qualitative data comes from the semi-structured interviews. The data collected through the interviews were processed using content analysis.

### 4.2. Demographic Information

A total of 22 students participated in the research, 54.55% of which were female and 45.45% were male. The sex profile of participants is shown in Chart 1.



**Chart 1: The Sex Profile of Participants** 

As Table 6 presents, most of the participants were 17 years old. One participant was 18 years old. 7 participants left this item blank.

**Table 6: Age Profile of Participants** 

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	17	14	63,6	93,3	93,3
	18	1	4,5	6,7	100,0
	Total	15	68,2	100,0	
Missing	System	7	31,8		
Total		22	100,0		

### 4.3. Findings about the Students' Habits of Computer and Internet

This section deals with the students' computer and internet use. As it is shown in Table 7, 86.4 % of participants use the computer at home. 9.1 % of them use the computer at school and 4.5 % of them use the computer at Internet cases. It is quite clear that the participants use the computer mostly at home.

Table 7: Where do you Usually Use Computer?

	Frequency	Percent	Valid Percent	Cumulative Percent
Home	19	86,4	86,4	86,4
School	2	9,1	9,1	95,5
Internet Cafe	1	4,5	4,5	100,0
Total	22	100,0	100,0	

Table 8 shows the responses given to the question "How often do you use a PC?" The option "sometimes" received the highest percentage (68.2%), followed by the option "always" with the percentage (22.7%). The option "rarely" received the lowest percentage (9.1%).

Table 8: How Often do You Use a PC?

	Frequency	Percent	Valid Percent	Cumulative Percent
Always	5	22,7	22,7	22,7
Sometimes	15	68,2	68,2	90,9
Rarely	2	9,1	9,1	100,0
Total	22	100,0	100,0	

The responses to the question "How often do you use Internet?" are shown in Table 9. While the option "sometimes" received the highest percentage (59.1%), the option "always" received a percentage of (31.8%). The option "rarely" received the lowest percentage (9.1%). When the results in Tables 8 and 9 were analyzed, it was found that there is a clear correlation between computer use and Internet use.

Table 9: How Often do You Use Internet?

	Frequency	Percent	Valid Percent	Cumulative Percent
Always	7	31,8	31,8	31,8
Sometimes	13	59,1	59,1	90,9
Rarely	2	9,1	9,1	100,0
Total	22	100,0	100,0	

In order to identify the correlation between the frequency of using computers and the Internet, Chi-square test was applied and it was found that there is a statistically significant correlation (sig=0.000<0.005) between the frequency of using the computer and the Internet. As it is shown in Table 10, the students who stated they always use the computer also declared that they always use the Internet.

Table 10: The Correlation between the Frequency of Using the Computer and the Internet

			How	often do you	use	
				Internet?		Total
			Always	Sometimes	Rarely	Always
		N	4	1	0	5
	Always	According to the frequency of using computer %	80,0%	20,0%	,0%	100,0%
	Sometimes	N	3	12	0	15
How often do you use computer?		According to the frequency of using computer %	20,0%	80,0%	,0%	100,0%
	Rarely	N	0	0	2	2
		According to the frequency of using computer %	,0%	,0%	100,0	100,0%
Total		According to the frequency of using computer %	7	13	2	22
			31,8%	59,1%	9,1%	100,0%

When the Internet experience level of participants was analysed in Table 11, it was found that nearly half of the participants (45.5%) were "experienced". In addition, 40.9% of the participants were "some experienced", but only 13.6% of them were "very experienced".

**Table 11: How Experienced are You with the Internet?** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some experienced	9	40,9	40,9	40,9
	Experienced	10	45,5	45,5	86,4
	Very experienced	3	13,6	13,6	100,0
	Total	22	100,0	100,0	)

As Table 12 displays, more than half of the students (54.5%) have good computer skills whereas a few of them (4.5%) have very good computer skills. Some of the participants (36.4%) have sufficient computer skills. However, very few of them (4.5%) have bad computer skills.

Table 12: How Well are your Computer Skills?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bad	1	4,5	4,5	100,0
	Sufficient	8	36,4	36,4	95,5
	Good	12	54,5	54,5	54,5
	Very good	1	4,5	4,5	59,1
	Total	22	100,0	100,0	)

Most of the students have very positive responses to the question in relation to use of the Internet and the computer for entertainment purposes as shown in Table 13. While 50% of the students sometimes use the computer and the Internet for entertainment, 36.4% of the participants always use the computer and the Internet for entertainment. Very few of them (13.6%) rarely use the computer and the Internet for entertainment.

**Table 13: Use Computer and Internet for Entertainment** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	8	36,4	36,4	36,4
	Sometimes	11	50,0	50,0	86,4
	Rarely	3	13,6	13,6	100,0
	Total	22	100,0	100,0	

When the frequency of using the computer and the Internet for homework was analysed in Table 14, it was found that all of the participants tend to use the computer and the Internet for homework. A very high percentage of the students (72.7%) sometimes use the computer and the Internet for homework. There is equivalence between the percentages of the responses to "always" and "rarely" options. 13.6% of the participants always use the computer and the Internet for homework. However, 13.6% of them rarely use the computer and the Internet for homework.

Table 14: Use of the Computer and the Internet for Homework

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	3	13,6	13,6	13,6
	Sometimes	16	72,7	72,7	86,4
	Rarely	3	13,6	13,6	100,0
	Total	22	100,0	100,0	

As it is shown in Table 15, the students have positive attitudes towards using the computer and the Internet for searching. While 13 students sometimes use the computer and the Internet for searching, 5 participants always use the computer and the Internet for searching. On the other hand, only 4 participants rarely use the computer and the Internet for searching.

Table 15: Use of the Computer and the Internet for Searching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	5	22,7	22,7	22,7
	Sometimes	13	59,1	59,1	81,8
	Rarely	4	18,2	18,2	100,0
	Total	22	100,0	100,0	

When the results in Tables 13, 14 and 15 are analyzed, it is seen that the participants use the computer and the Internet firstly for homework (72.7%), secondly for searching information (59.1%) and thirdly for entertainment (50%).

# 4.4. Attitudes of High School Students towards the Use of MOODLE in a Blended EFL Course

Table 16 concerns students' MOODLE use. As shown in Table 16, many of the students (40.9%) use MOODLE "once a week" whereas some of them (22.7%) use MOODLE "twice or three times a week". Only 18.2% of them use MOODLE "less than once a week".

**Table 16: Frequency of MOODLE Use** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Val	More than once a day	2	9,1	9,1	9,1
	Nearly once a day	2	9,1	9,1	18,2
	Twice or three times a week	5	22,7	22,7	40,9
	Once a week	9	40,9	40,9	81,8
	Less than once a week	4	18,2	18,2	100,0
	Total	22	100,0	100	

The participants were asked to rank the applications in MOODLE from the most popular to the least popular. As it is shown in Table 17, the most popular application is "Message" with 4.50 mean, the second most popular application is "Chat" with 3.95 mean, the third most popular application is "Glossary" with 3.54 mean, the fourth most popular

application is "Forums" with 3.45 mean, and the least popular application is "Wiki" with 2.86 mean.

Table 17: Which Ones did You Like Most? (Rank them from 1 to 6)

		Wiki	Chat	Forums	Glossary	Message
N	Valid	22	22	22	22	22
Mean		2,8636	3,9545	3,4545	3,5455	4,5
Std. Deviation		2,05393	1,78558	1,22386	1,37	1,43925

Thoughts of the participants about MOODLE in EFL courses are given in Tables 18 and 19. The results reveal that they do not prefer MOODLE to face-to-face instruction and also they would not like to use MOODLE next year. The percentages of those who would like to use MOODLE for other lessons and the number of those who would not like to use MOODLE for other lessons is nearly equal. This finding is contrary to the result of Tekin (2007). In his study, 93.9% of participants would prefer to use MOODLE for other lessons. On the other hand, most of the participants declared that they would like to get MOODLE on mobile phone.

Table 18: Opinions of Participants about MOODLE

		Do you prefer English lesson on MOODLE (online) to face-to- face English lesson?	Do you prefer blended English lsson supported by MOODLE to face -to-face English lesson?
N	Valid	22	22
Mean		2,0455	1,8636

**Table 19: Opinions of Participants about MOODLE** 

	Would you like to use MOODLE next year?		Would you like to use MOODLE for other school subjects?	Would you like to reach MODLE on your mobile phone?
NN	Valid 22		22	22
Mean		1,5909	1,5000	1,2727

# 4.5. Gender Difference in the Attitudes towards the Use of MOODLE in a Blended English Lesson

Table 20: Mann-Whitney U-Test for Gender Difference

Gender	NI	Mean	Sum of	Mann-W	hitney U-Test
Gender	11	Rank	Ranks	Z	p
Female	12	10,33	124,00	-0,926	0,354
Male	10	12,90	129,00	-0,920	0,334

In order to identify whether there is a significant difference between genders in their attitudes towards the use of MOODLE, Mann-Whitney U-Test was applied and the results were given in Table 20. Suggested hypotheses are as follows;

 $H_0$ : There is no difference between the scale scores of the students in their attitudes towards the use of MOODLE according to gender difference.

 $H_1$ : There is a difference between the scale scores of the students in their attitudes towards the use of MOODLE according to gender difference.

As the result of Mann-Whitney U-Test (p>0.05) it was found that there is no significant difference between the scale scores of the students in their attitudes towards the use of MOODLE according to gender difference (z=-0.926, p=0.354). This is in line with the finding of Siirak (2011).

## 4.6. Students' Perceptions of MOODLE

**Table 21: Students' Perceptions of MOODLE** 

Item	Strongly agree	Agree	No Opinion	Disagree	Strongly Disagree	Mean
useful for English	7 (%31,8)	11 (%50,0)	4 (%18,2)	-	-	1,86
	3 (%13 6)	11 (%50.0)	7 (%31.8)	1 (%4 5)	_	2,27
	3 (7013,0)	11 (7030,0)	7 (7031,0)	1 (70 1,5)		2,27
•						
_						
	4 (%18.2)	16 (%72.7)	2 (%9 1)	_	_	1,90
	4 (7010,2)	10 (7072,7)	2 (707,1)			1,70
	7 (%31,8)	14 (%63,6)	1 (%4,5)	-	-	1,72
	4 (%18.2)	10 (%45.5)	7 (%31.8)	1 (%4.5)	_	2,22
	7 (7010,2)	10 (7043,3)	7 (7031,0)	1 (704,5)		2,22
Moodle is easy for	6 (%27,3)	7 (%31,8)	7 (%31,8)	2 (%9,1)	-	2,22
me.						
Moodle makes me						
	5 (%22.7)	10 (% 45 5)	4 (% 18 2)	3 (% 13 6)		2,22
content easily even if	3 (7022,7)	10 (7045,5)	4 (7010,2)	3 (7013,0)	_	2,22
I don't attend lesson.						
Moodle makes						
English learning more	3 (%13,6)	13 (%59,1)	3 (%13,6)	3 (%13,6)	-	2,27
interesting.						
Using Moodle is a			2 (%0 1)	13	7 (% 31 8)	4,22
bad idea.	-	-	2 (%9,1)	(%59,1)	7 (%31,8)	4,22
Working with Moodle	2 (0/ 12 6)	10 (0/ 45 5)	7 (0/ 21 9)	1 (0/ 4.5)	1 (0/ 4.5)	2.40
is fun.	3 (%13,0)	10 (%43,3)	7 (%31,8)	1 (%4,3)	1 (%4,3)	2,40
I like working with	2 (0/ 12 ()	10 (0/ 45 5)	( (0/ 27 2)	2 (0/ 12 ()		2.40
Moodle.	3 (%13,0)	10 (%43,3)	0 (%27,3)	3 (%13,0)	-	2,40
Moodle is boring.	-	3 (%13,6)	7 (%31,8)	9 (%40,9)	3 (%13,6)	3,54
Moodle is hard to	1 (0/ 4.5)			10		
learn and use.	1 (%4,5)	3 (%13,6)	5 (%22,7)	(%45,5)	3 (%13,6)	3,50
Use of Moodle is						
	3 (%13,6)	13 (%59,1)	6 (%27,3)	-	-	2,13
	, , ,	, , ,	` , ,			,
	5 (%22,7)	15 (%68,2)	2 (%9,1)	-	-	1,86
	- (,.)	- (, )	(, )			,
	1.7					
		7 (%31.8)	_	_	_	1,31
	(%68,2)	. (,,,,,,,				-,51
working with Moodle.	1 (%4,5)	5 (%22,7)	7 (%31,8)	6 (%27,3)	3 (%13,6)	3,22
Collaborations with Moodle upgrade my	6 (%27,3)	11 (%50,0)	4 (%18,2)	1 (%4,5)		2,00
	Use of Moodle is useful for English learning.  Using Moodle enables me to accomplish exercises on the coursebook more quickly and more easily.  Using Moodle for English learning increases my productivity.  I increased my chances of getting knowledge about homework with Moodle.  Moodle is clear and understandable.  Learning to operate Moodle is easy for me.  Moodle makes me follow English lesson content easily even if I don't attend lesson.  Moodle makes English learning more interesting.  Using Moodle is a bad idea.  Working with Moodle is fun.  I like working with Moodle.  Moodle is boring.  Moodle is hard to	Use of Moodle is useful for English learning.  Using Moodle enables me to accomplish exercises on the coursebook more quickly and more easily.  Using Moodle for English learning increases my productivity.  I increased my chances of getting knowledge about homework with Moodle.  Moodle is clear and understandable.  Learning to operate Moodle is easy for me.  Moodle makes me follow English lesson content easily even if I don't attend lesson.  Moodle makes English learning more interesting.  Using Moodle is a bad idea.  Working with Moodle is fun.  I like working with Moodle is fun.  I like working with Moodle is fun.  I like working with Moodle is hard to learn and use.  Use of Moodle is useful for collaborative learning.  Use of Moodle is useful for increasing individual learning.  Feedback is applied to correct any mistakes in writing.  L need beln while	Use of Moodle is useful for English learning.  Using Moodle enables me to accomplish exercises on the coursebook more quickly and more easily.  Using Moodle for English learning increases my productivity.  I increased my chances of getting knowledge about homework with Moodle.  Moodle is clear and understandable.  Learning to operate Moodle makes me follow English lesson content easily even if I don't attend lesson.  Moodle makes English learning more interesting.  Using Moodle is a bad idea.  Working with Moodle is fun.  I like working with Moodle is fun.  I like working with Moodle is and bad idea.  Working with Moodle is a bad idea.  Working with Moodle is fun.  I like working with Moodle is fun.  I like working with Moodle is useful for collaborative learning.  Use of Moodle is useful for collaborative learning.  Feedback is applied to correct any mistakes in writing.  I need help while correct any mistakes in writing.  I need help while correct any mistakes in writing.	Use of Moodle is useful for English learning.	Use of Moodle is useful for English learning.	Use of Moodle is useful for English learning.   Using Moodle enables me to accomplish exercises on the coursebook more quickly and more easily.

**Table 21: (Continued)** 

Question	Item	Strongly agree	Agree	No Opinion	Disagree	Strongly Disagree	Mean
19	I enjoy collaborative learning as I can work with other students.	4 (%18,2)	9 (%40,9)	7 (%31,8)	2 (%9,1)	-	2,31
20	I feel comfortable using Moodle on my own.	5 (%22,7)	11 (%50,0)	4 (%18,2)	2 (%9,1)	-	2,13
21	I communicate with my friends, English teacher and the students from other countries on Moodle.	2 (%9,1)	3 (%13,6)	7 (%31,8)	7 (%31,8)	3 (%13,6)	3,27
22	Moodle have inreased my motivation to learn English.	3 (%13,6)	14 (%63,6)	4 (%18,2)	1 (%4,5)	-	2,13
23	I have improved my vocabulary through the activities on Moodle.	3 (%13,6)	13 (%59,1)	5 (%22,7)	1 (%4,5)	-	2,18
24	I have improved my reading skills through the activities on Moodle	2 (%9,1)	13 (%59,1)	4 (%18,2)	2 (%9,1)	1 (%4,5)	2,40
25	I have improved my listening skills through the activities on Moodle.	2 (%9,1)	10 (%45,5)	10 (%45,5)	-	-	2,36
26	I have improved my writing skills through the activities on Moodle.	6 (%27,3)	11 (%50,0)	4 (%18,2)	1 (%4,5)	-	2,04
27	I have improved my speaking skills through the activities on Moodle.	1 (%4,5)	3 (%13,6)	14 (%63,6)	3 (%13,6)	1 (%4,5)	3,00
28	I have improved my grammar through the activities the on Moodle.	3 (%13,6)	12 (%54,5)	5 (%22,7)	2 (%9,1)	-	2,27
29	I have become more active in English lesson by using Moodle.	3 (%13,6)	8 (%36,4)	7 (%31,8)	3 (%13,6)	1 (%4,5)	2,59
30	Using Moodle have increased my grades in English exams.	4 (%18,2)	9 (%40,9)	6 (%27,3)	2 (%9,1)	1 (%4,5)	2,40

When Table 21 is generally analyzed, the results clearly reveal hat MOODLE is efficient in English learning and most of the students are satisfied with using MOODLE to support English lessons. The high mean (59.1%) of the 'disagree' option answer to the 9<sup>th</sup> statement (Using MOODLE is a bad idea) also supports the idea that students are delighted to use MOODLE and they think that using MOODLE is useful for them. These findings correlate with the findings of Arslan (2009), Kargiban and Kaffash (2011), and Siirak (2011). Furthermore, the use of MOODLE positively affects their English learning and increases their motivation (63.6%) and productivity (72.7%). In a similar vein, majority of the students (40.9%) agrees that using MOODLE has increased their grades in English exams. These findings are in line with the findings of Arslan (2009) and Aydın (2011).

Students also agree that MOODLE is easy to use and simple. This is similar to the findings of Sevim (2009) and Aydın(2011). On the other hand it is a fact that while using MOODLE, many students needed help.

In addition, it is worth mentioning that MOODLE improves all four skills (reading 59.1%, listening 45.5%, writing 50%, speaking 13.6%) of the students as well as grammar (54.5%) and vocabulary (59.1%). However, students (27.3%)strongly agree that MOODLE improves their writing skills much more than other language skills. This is in line with the findings of Arslan (2009). It is also interesting to note that students think that MOODLE is both useful for collaborative learning (59.1%) and individual learning (68.2%).

### 4.7. The Impact of Using MOODLE on EFL Learners' Achievement

**Table 22.Paired Samples T-Test for Exam Scores** 

			Mean SS -		T-testi	
Group	N	Mean		T	S.D.	Sig
Control 1 <sup>st</sup> Term	22	72,06	13,388	1 607	21	
Experimental 1 <sup>st</sup> Term	22	67,44	9,133	- 1,607	21	0,123
Control 2 <sup>nd</sup> Term	22	78,69	8,669	1 212	21	0.204
Experimental 2 <sup>nd</sup> Term	22	74,63	12,230	1,313	21	0,204
Control 1 <sup>st</sup> Term	22	72,06	13,388	2.056	21	0.052
Control 2 <sup>nd</sup> Term	22	78,69	8,669	-2,056	21	0,052
-						
Experimental 1 <sup>st</sup> Term	22	65,09	12,287	2.005	21	0.005
Experimental 2 <sup>nd</sup> Term	22	74,84	11,773	-3,085	21	0,005

In order to identify whether the use of MOODLE made a difference in both  $1^{st}$  term and  $2^{nd}$  term English exam scores of the students in the experimental group and the

students in the control group, Paired Samples T-Test was applied and the results are given in Table 22. Suggested hypotheses are as follows;

- $H_0$ : There is no difference between 1<sup>st</sup> English exam scores of the students in the experimental group and the students in the control group.
- $H_1$ : There is a difference between 1<sup>st</sup> English exam scores of the students in the experimental group and the students in the control group.
- $H_0$ : There is no difference between  $2^{nd}$  English exam scores of the students in the experimental group and the students in the control group.
- $H_1$ : There is a difference between  $2^{nd}$  English exam scores of the students in the experimental group and the students in the control group.
- $H_0$ : There is no difference between  $1^{\rm st}$  and  $2^{\rm nd}$  English exam scores of the students in the control group.
- $H_1$ : There is a difference between 1<sup>st</sup> and 2<sup>nd</sup> English exam scores of the students in the control group.
- $H_0$ : There is no difference between 1<sup>st</sup> and 2<sup>nd</sup> English exam scores of the students in the experimental group.
- $H_1$ : There is a difference between 1<sup>st</sup> and 2<sup>nd</sup> English exam scores of the students in the experimental group.

As the result of Paired Samples T-test, there is statistically significant differences between  $1^{st}$  and  $2^{nd}$  English exam scores of the students in the experimental group (t=3.085 sig=0.005). This result clearly indicates that the use of MOODLE in blended EFL

lessons increased learners' achievement. The findings correlate with the findings of Arslan (2009) and Aydın (2011).

### 4.8. The Analysis of the Semi-structured Interview

Semi-structured interviews were conducted with 10 participants from the experimental group to gain a deeper insight about their experience with MOODLE (See Appendix II). The participants were selected using random sampling procedures. All the names of the students in the experimental group were written on pieces of paper and put into a bag. Then, the researcher took out the pieces of paper one by one in front of the class and nominated 10 students as interviewees. In this section, the responses given to the interview questions were analyzed.

### 4.8.1. The Advantages of Using MOODLE

All the interviewees stated that MOODLE was beneficial to them. They stated the advantages of using MOODLE as follows;

- ◆ Learning new words.
- ◆ Improving grammar skills.
- ◆ Improving academic achievement.
- ◆ Endearing English.
- ◆ Meeting new friends.
- Reinforcement.

One of the participants explained its advantage as follows;

"I had not taken tests or completed exercises at home before MOODLE but I started to take the quizzes which you put on MOODLE. In short, I think it is useful" (S1).

Another participant stated that:

"In my opinion it is beneficial. ... It was more useful for exams. For instance we studied universities in 11<sup>th</sup> unit and you made us do writing and listening exercises about universities so it became useful for us" (S10).

One of the interviewees also informed that he learnt the content of English lessons which he could not attend during one week and studied for the exam by MOODLE as follows:

"It was useful for me. For example: I could not come to school but I studied the subjects that I had missed on MOODLE so I could be ready for the exam" (S7).

In addition to these, one participant reported that using MOODLE made him use other websites in English easier as follows:

"I had difficulty in using MOODLE in the beginning because it is an English website, but I have learnt it in time. Then I have realized that I can use other English websites more easily thanks to MOODLE" (S2).

However one of the participants stated that:

"It was useful but not necessary for me" (S4).

### 4.8.2. Problems and Disadvantages Encountered while Using MOODLE

The main problems that the students had while using MOODLE are as follows;

- ◆ The size for loading files or slides was limited.
- ◆ In the beginning it was hard to use.
- ◆ Internet connection problems at home.
- ◆ Some computers did not open the website due to not being loaded with flash player.
- Creating an account.

The problems stated above were only encountered once and only in the beginning of using MOODLE. One of the participants said that:

"I only had problem while registering with the site" (S3).

Another participant also supported this information as follows:

"At first I had difficulty in creating a new account ..." (S5).

The problems encountered while using MOODLE were generally related to the deficiency of some programmes on PCs and temporary connection. One participant stated that:

"In the Internet cafe I sometimes had problems because there was no flash player or other programmes on some of the computers. However when I entered MOODLE on my computer at home I did not have any problem" (S2).

Another interviewee also said that:

"Only videos caused problems. I think the problem was related with my computer. I did not encounter any other problem" (S7).

Besides these problems, one of the interviewees stated that it took his time as follows:

"It does not have any disadvantages but sometimes it can take a lot of time" (S1).

### 4.8.3. Students' Views on Blended Learning

All of the interviewees declared that the use of MOODLE with face-to-face learning togetheris better than using only one of them. All of them stated that MOODLE is effective when integrated into face-to-face teaching especially for the revision and reinforcement of the subjects in English lessons. Therefore, they preferred blended learning with MOODLE. One of the interviewees said that:

"I think blended learning is better for repetition and reinforcement. We both learn at school and on MOODLE. This has changed our marks and opinions on English. In fact it changed my opinion. I did not like English last year. But this year I like it much more. I think MOODLE has a great impact on this change" (S3).

Another participant stated that:

"I prefer blended learning because MOODLE reinforces face-to-face learning" (S6).

Only two of the participants said that they preferred learning only with MOODLE. These two students gave these reasons to this preference; relaxed atmosphere, slide shows, the benefits of visual learning and concentration problems because of other students and noise. One of two students declared that:

"I prefer MOODLE because it is better to study on the Internet. We load slides then everybody can watch it. Visual learning is better, I think. You talk with your classmates and this distracts me. I have concentration problems. So in my opinion MOODLE is better. It is silent and you are alone" (S3).

### 4.8.4. Students' Perceptions of MOODLE

All the interviewees stated that the activities on MOODLE support face-to-face English lessons. The supporting activities were reported as quizzes, writing, listening and reading activities, and collaborative story writing tasks. One of the participants reported that:

"It improved my vocabulary very much. Also there are sections for Units 10 and 11, and I look for words on MOODLE. It makes my study for exams easier" (S5).

Another participant stated that:

"You ask us the meanings of words at school but I cannot keep them in mind. However, our classmates load words on MOODLE. They are more easily remembered. Even when you look at it just once it sticks in your mind. You revise our writing works. It is very beneficial for us" (S3).

One of the participants also declared that:

"I think all of them supported. We do listening, reading, writing in the lesson and there are the activities for all of them on MOODLE. It became very useful for me" (S4).

Furthermore, most of the interviewees informed that they thought the activities were enjoyable and useful. On the other hand, a few students stated that in their opinion, some reading, listening, video activities and quizzes were boring. One participant stated that:

"Generally reading texts are boring because they are long. I can forget what I read in the beginning of the text. So that makes me bored" (S7).

However, all the interviewees agreed that all the activities were necessary and beneficial even if they were boring. In addition, all the students declared that they would like to use MOODLE next year. They also stated that the use of MOODLE in other lessons can be good and useful. One of the interviewees stated that:

"If you asked this at the beginning of the term I would definitely say 'no'. But now I would like to use it. I think it is effective. If you look at my marks, it is very effective" (S3).

Another interviewee said that:

"I would like to use it because it is a good programme, it helped my lessons very much In the future we will go to university, it is important at university too. English is important in every field of life. So it is useful" (S9).

Another participant also added that:

"Even I would like to use it, not only for English lessons, but also for other lessons" (S8).

### 4.8.5. Collaborative Story Writing Tasks

Most of the students stated that they enjoyed the collaborative story writing tasks very much. The reasons for enjoying the collaborative story writing tasks are as follows;

- Improving imagination.
- Group work.
- Combination of different opinions.
- Becoming close friends.
- Improving collaboration and cooperation.
- Improving English.
- Competition between groups.

One of the participants stated that:

"I think it was most entertaining, each student in the group wrote what they wanted. There was no certain thing. Everything was changeable. My friend wrote something, I wrote something else, but at the end a whole story came up and it was enjoyable to read" (S4).

Another participant also supported the same idea as follows:

"Yes it is very nice. We became close friends. We talk about it, then, in the evening we write it on MOODLE. We wonder who wrote what. It is exciting" (S10).

One participant also added that:

"Yes it was so enjoyable, because the emergence of a story combining different ideas is more fun than a story written by only one person" (S8).

However, only one student reported that he disliked the collaborative story writing activity because he thought that face-to-face group work was more useful than group work on the net. He explained that:

"I did not like that activity. Because I think it is more individual on the Internet. In my opinion face-to-face group work can be more efficient" (S7).

### **4.8.6.** Glossary

From the interview reports, it was found that glossaries helped all the interviewees to learn new vocabulary. Also, interviewees stated that they benefited from glossaries in quizzes and exams. In addition to these, they informed that they could learn the right meaning and the Turkish equivalent of the words by the help of glossary activity. One of the interviewees explained why he thought that it was beneficial, as follows:

"I found the meanings of new words in the glossary section that I could not find in the dictionary" (S1).

Another participant also reported that:

"Of course it did. For example, I saw many words in the glossary section that I overlooked. Then, I found and underlined the words that I saw on MOODLE and learned their meanings" (S7).

One of the interviewees added that:

"It is useful. I prepared a glossary for the 9<sup>th</sup> Unit. If I did not do it I could not learn so many words. Thanks to this activity I have learned a lot of words by preparing a glossary. My classmates prepared a glossary for the 10<sup>th</sup> and 11<sup>th</sup> Units too. They also did their best. Those glossaries were also useful for me" (S9).

### 4.8.7. The Effect of MOODLE on Language Skills

All the participants reported that using MOODLE improved all their language skills. However, they stated that some skills improved much more than other skills. The students put the skills in order according to improvement level as follows; 1. writing skills, 2. reading skills, 3. listening skills and 4. speaking skills. One of the participants rankedthe activities on MOODEL as follows:

"Writing, reading, listening and speaking" (S2).

Another participant declared that:

"It improved my writing and listening skills. I listened to the tracks on MOODLE and tried to fill in the gaps. In the writing section you corrected our writing works, so we could see the correct forms" (S4).

As agreed among students, the use of MOODLE improved speaking skills least.

One of the interviewees stated that:

"It has improved my writing and listening skills. Generally, I try to improve my speaking skill by watching foreign films and serials" (S8).

Another interviewee also said that:

"I think MOODLE has improved my writing skills. In addition it has improved my listening and reading skills. But I think there was a deficiency in speaking because we could not speak on MOODLE" (S9).

### 4.8.8. The Effect of Using Chat and Mail on Enhancing Communication

Whereas half of the interviewees agreed that using chat and mail on MOODLE enhanced their communication with the others who used the same system, the other half disagreed. One of the students who thought that chat and mail on MOODLE enhanced their communication declared that:

"When everybody entered MOODLE to load homework there was a lot of people online. I think it became more popular than Facebook for our class. For example, when you look at Facebook you cannot find anyone but when you enter MOODLE you can even talk to your friends about things you want to do tomorrow. So I think it affects not only English learning but also our social relationships" (S3).

In spite of the fact that there is no obvious rule for students to communicate in English, another student added that:

"Certainly, I think it enhanced our communication with foreign people rather than our classmates" (S6).

However, one of the students who thought that chat and mail on MOODLE did not enhance their communication stated that:

"I cannot say it enhanced, because I did not use it" (S9).

On the other hand, most of the students stated that they preferred chatting and sending messages on social networks such as Facebook. They declared that they could reach their friends easier and quicker because almost everyone was online on Facebook. One of the students stated that:

"I did not use it because we could communicate with our friends on other social networks. For example, when I could not do anything I could ask my friends easily and quickly on Facebook. We could not find everybody on MOODLE" (S8).

Another student also added that:

"There are much more people on Facebook than MOODLE. Therefore, I used Facebook" (S7).

### 4.8.9. "Things We're Interested in" Section

In this section, the students got information about their hobbies, lifestyles, culture and customs by posting questions, answers and comments to both their classmates and foreign students on the same system. Six of the students reported that they used this section actively. These students declared that they liked this section because they could have an opportunity to use English, improve their English and also meet foreign students. One of the participants said that:

"It was good to improve my English. Also, I had an opportunity to learn about foreign students' lifestyles culture, customs and opinions. It was also nice for me" (S9).

Another participant added that:

"Using the same language is more important than learning about their culture and I think MOODLE is very effective in this regard. I have met Czechs. Maybe I could not meet them during my life. Otherwise, how could I meet Czechs?" (S3).

However, four of the participants informed that they did not ask any questions or answer any questions. As the reason, they stated that this section did not draw their interest. One of them stated that:

"I used it only once. It did not draw my interest" (S2).

### 4.8.10. Students' Suggestions about MOODLE

Most of the students reported that they would like to listen to music share photos or videos and play games on MOODLE. Some of them stated that they would love to meet more foreign students. In addition they reported that they would love MOODLE much more if it were like Facebook. One of the interviewees explained his opinion as follows:

"There could be funny videos. We could share music. While doing homework we could be listening to music. ... As I said before, if students from other countries had joined much more we could have chatted together and shared our photos, it would have been much more enjoyable" (S2).

Another interviewee stated that:

"Maybe there could be music, in addition, if the Czechs had been online more I would have liked to talk with them very much" (S10).

Another interviewee also added that:

"MOODLE is a useful thing. But I think it would be better if there were activities similar to games" (S5).

However one of the participants said that:

"... There is already everything, but it did not draw my attention" (S6).

### **CHAPTER FIVE**

#### 5. CONCLUSION

This chapter concludes the findings of the study and provides some potential educational implications. In addition, the limitations of this study and some suggestions for further studies are expressed at the end of the chapter.

### **5.1. Conclusion and Implications**

Today's students are digital natives, as called by Prensky (2001). They actively use computers, the Internet and social media. The findings showed that the students who participated in this study (86.4%) used the computer mostly at home. The results of the questionnaire showed that the students use the computer and the Internet firstly for homework (72.7%), secondly for searching information (59.1%) and thirdly for entertainment (50%). As to the use of MOODLE, students agree that MOODLE is easy to use and simple. This is similar to the findings of Sevim (2009) and Aydın (2011). However, many students needed help only in the beginning of using MOODLE. The problems encountered while using MOODLE were generally related to the deficiency of some programmes on PCs and temporary connection.

Student's being familiar with the computer and the Internet does not automatically enable us to apply all technological tools into the classroom. According toLiaw (2002), the effective implementation of technology depends upon users having a positive attitude towards it. Therefore, the study aims to investigate Turkish high school students' attitudes towards the use of MOODLE in ELT blended instruction. The overall analysis of the data from both questionnaires and interviews indicates that Turkish high school students who

participated in this study have a positive attitude towards the use of MOODLE in ELT blended instruction. These findings correlate with the findings of Arslan (2009), Kargiban and Kaffash (2011), and Siirak (2011). The Mann-Whitney U-Test (p>0.05) also showed that there is no significant difference between the scale scores of the students in their attitudes towards the use of MOODLE according to gender difference (z=-0.926, p=0.354). This is in line with the finding of Siirak (2011). On the other hand, it is interesting to point out that students would not like to use MOODLE next year. The most important reason is that the students participated in this study would be at 12 the grade the following year and they would have to study very hard for the university entrance exam. Therefore, they would not have time for MOODLE.

The study also seeks to find out whether the use of MOODLE in English lessons as a tool for blended instruction makes a significant difference to the achievement of the students. Majority of the students (40.9%) agrees that using MOODLE has increased their grades in English exams. In addition, as the result of Paired Samples T-test, there is statistically significant differences between 1<sup>st</sup> and 2<sup>nd</sup> English exam scores of the students in the experimental group (t=-3.085 sig=0.005). These results clearly reveal that the use of MOODLE in blended EFL lessons increased learners' achievement. Furthermore, the use of MOODLE positively affects their English learning and increases their motivation (63.6%) and productivity (72.7%). These findings are in line with the findings of Arslan (2009) and Aydın (2011. In addition, it was observed that most of the students started to use MOODLE much more after the first exam since their exam scores got higher.

The findings pertaining to the interview and the questionnaire indicate that the activities on MOODLE support face-to-face English lessons and MOODLE is beneficial. It was found that MOODLE is effective when integrated into face-to-face teaching especially for the revision and reinforcement of the subjects in English lessons. While the supporting activities were reported as quizzes, writing, listening and reading activities, and collaborative story writing tasks, the advantages of using MOODLE were noted as learning new words, improving grammar skills, improving academic achievement, endearing

English, meeting new friends and reinforcement. It is also significant to mention that one of the students mentioned that he learnt the content of English lessons which he could not attend during one week and studied for the exam by MOODLE. By the help of MOODLE students can follow the lesson even when they cannot attend the classroom. In this regard, MOODLE can also be used for individual learning.

Chat, wiki and glossary modules on MOODLE enabled students to work collaboratively on the tasks given by the researcher. However, the findings showed that most of the students who participated in the study preferred chatting and sending messages on social networks. Possible explanation is that there were more people on social networks. By the help of wiki, students actively collaborated on writing wiki projects. It appears from the findings that the students enjoyed collaborative writing tasks much more than individual writing tasks. The reasons for enjoying the collaborative story writing tasks were reported as improving imagination, group work, combination of different opinions, becoming close friends, improving collaboration and cooperation, improving English and competition between groups. As to building glossaries cooperatively, it helped students to improve their vocabulary and thus increased their achievement in the quizzes and the exams. In this regard, it can be said that MOODLE offers mediating tools which help to achieve the objectives of a social constructivist-based classroom in many ways (Baskerville & Robb, 2005). Since collaboration and interaction facilitate students' language development, teachers can benefit from MOODLE to create constructivist environments.

All four skills were integrated into the study. A section was assigned for each skill, grammar and vocabulary. The findings display that MOODLE improves all four skills (reading 59.1%, listening 45.5%, writing 50%, speaking 13.6%) of the students as well as grammar (54.5%) and vocabulary (59.1%). However, students (27.3%) strongly agree that MOODLE improves their writing skills much more than other language skills. This is in line with the findings of Arslan (2009). In this respect, MOODLE can be utilised to improve students' writing skills in particular, as well as other skills, grammar and vocabulary.

In conclusion, MOODLE is an effective learning tool supporting blended learning. By encouraging students' motivation and interest to English language, it also increases the academic achievement. This study can be a beneficial guide for English teachers who look for new ideas to make their instruction more interesting and innovative. The findings of the study can also give valuable information to the MONE about integrating blended-instruction with MOODLE in EFL at high school level.

#### 5.2 Limitations

Following are some limitations of the study:

- 1. This study is limited to a period of 15weeks in an environment where students received English lessons for only four hours each week. However, a longer treatment may have yielded more fruitful results.
- 2. As this study was conducted with 22 students at Lüleburgaz High School, the results may not be generalised to other settings.
- 3. The course management system on which this study was conducted belongs to a Czech gymnazium. Therefore, the researcher did not have opportunity to add plug-in for the use of MOODLE on mobile phones.

# **5.3 Suggestions for Further Research**

Regarding the findings of the study, some suggestions for further research are provided.

 Besides Turkish students, there were foreign students (French, Slovakian, Swedish and Czech) on the same system. Thus, MOODLE allowed studentsto chat and meet new friends from other countries on the same system. This motivated them to use MOODLE. Therefore, it is highly suggested to add students of other cultures and countries to MOODLE so that chat and other communication tools can be fully utilized.

- 2. As this study's population was limited to only 22 high school students, further studies can be conducted with a larger population.
- 3. The impact of some variables such as age and educational level on attitudes towards blended-learning with MOODLE can also be examined.
- 4. The target population of this study focused on students only. Teachers' perceptions and attitudes are very valuable as well, so further study can also include teachers.
- 5. Most of the students reported that they would like to get MOODLE on mobile phone. The implementation of MOODLE on mobile phones as mobile learning (m-learning) should also be investigated.

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