THE EFFECTS OF A LEARNING MANAGEMENT SYSTEM ON THE

ACHIEVEMENT OF UNIVERSITY EFL STUDENTS

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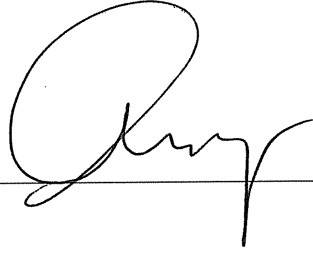Hatice Bilgin

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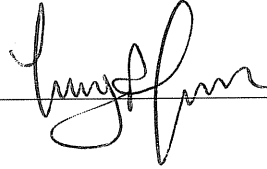
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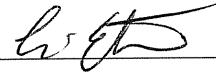
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Thesis Abstract

Hatice Bilgin, "The Effects of a Learning Management System on the Achievement of Universtiy EFL Students"

The aim of this study is to explore the effects of an online learning management system called *Macmillan English Campus* (*MEC*) on the achievement and opinions of Turkish university preparatory students studying English as a foreign language. The study employed quasi-experimental design so as to realize this aim. Two A level preparatory classes, each consisting of 36 Turkish EFL students in İstanbul Technical University School of Foreign Languages, were assigned as experimental and control groups. The students in the experimental class used *MEC* as part of their courses as well as following the required materials while the control class followed only the materials required by the preparatory program. The students in both classes were given a pre-test, progress-test and post-test. The students in the experimental class were given a student questionnaire to find out their opinions on their experience with *MEC*.

The findings of the study indicated that the students in the experimental class outperformed the students in the control class in terms of reading, listening and overall achievement. However, there was no significant difference between the classes in terms of grammar and vocabulary achievement. The results of the student questionnaire revealed that the students in the experimental class found *MEC* convenient. They also found the resources in *MEC* useful and helpful in their English learning. However, they did not like using *MEC* compulsorily as part of their courses.

Tez Özeti

Hatice Bilgin, "Bir Öğrenme Yönetim Sisteminin İngilizceyi Yabancı Dil Olarak Öğrenen Üniversite Öğrencilerinin Başarısı Üzerindeki Etkisi"

Bu çalışmanın amacı *Macmillan English Campus* (*MEC*) adındaki öğrenme yönetim sisteminin İngilizceyi yabancı dil olarak öğrenen Türk üniversite hazırlık öğrencilerinin başarı ve görüşleri üzerindeki etkisinin araştırılmasıdır. Bu amacı gerçekleştirmek için çalışmada yarı-deneysel yöntem kullanılmıştır. İstanbul Teknik Üniversitesi Yabancı Diller Yüksekokulunda İngilizceyi yabancı dil olarak öğrenen Türk öğrencilerden oluşan 36 kişilik iki tane A kuru sınıfından bir tanesi deney diğeri kontrol sınıfı olarak atanmıştır. Deney sınıfındaki öğrenciler zorunlu olan materyallerin yanı sıra *MEC*'i aldıkları dersler kapsamında kullanmışlardır. Kontrol sınıfını sadece hazırlık programı tarafından zorunlu olan materyalleri takip etmiştir. Her iki sınıftaki öğrenciler ön test, gelişim testi ve son test almışlardır. Deney sınıfındaki öğrencilere *MEC* deneyimleri hakkındaki görüşlerini öğrenmek amacıyla öğrenci anketi verilmiştir.

Çalışmanın sonuçları göstermiştir ki deney sınıfındaki öğrenciler kontrol sınıfındaki öğrencileri okuma, dinleme ve genel başarı yönünden geçmişlerdir. Fakat dilbilgisi ve kelime başarısı açısından sınıflar arasında belirgin bir fark yoktur. Öğrenci anketinin sonuçları gösteriyor ki deney sınıfındaki öğrenciler *MEC*'i kullanışlı buluyorlar. Ayrıca, *MEC*'deki kaynakları faydalı ve İngilizce öğrenmelerinde yardımcı buluyorlar. Fakat *MEC*'in derslerde zorunlu olarak kullanılmasından hoşlanmıyorlar.

ACKNOWLEDGEMENTS

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CHAPTER 1

INTRODUCTION

This chapter is mainly divided into five sections. Background to the study, the purpose

of the study, the significance of the study, the research questions investigated in the

study, and the definitions of the terms will be presented respectively.

Background to the Study

With the development of technology, the computer is now easily accessible to almost

everyone. It has also become an indispensable part of every field of inquiry. Today,

there are sophisticated microcomputers, which are small, convenient and portable, and

many different software programs designed for language learning. The use of computers

in foreign language education is not a new idea (Kenning& Kenning, 1983; Higgins&

Johns, 1984; Ahmad& Corbett& Rogers& Sussex, 1985). Even in the sixties and

seventies, language laboratories were being installed in numerous educational settings.

The traditional language laboratory was comprised of a series of booths, each providing

a cassette deck, and accompanying microphone and headphone. However, many things

have changed since 1960s.

Along with the changes in the way languages are taught and technological developments, the use of computers in language classes have changed dramatically. The Internet has started to take an important place in foreign language learning (Dudeney, 2000; Teeler & Gray, 2000; Mithchell, 2009). We now have a new platform which includes sounds, images, animations, interactions and various multimedia channels. This new platform which has given rise to online learning also constitutes a ground for foreign language teaching and learning (Preston, 2004; Brenton, 2009; Rudestam & Schoenholtz-Read, 2010).

All these developments in technology have also made the learners of our time fundamentally different. Prensky (2001) points out that "students have changed radically. Today's students are no longer the people our educational system was designed to teach. Students today are all "native speakers" of the digital language of computers, video games and the Internet."(p.1). He calls this new generation "digital natives", which he found as "the most useful designation" (Prensky, 2001: 1) for them. Baird and Fisher (2005-2006) use the terms "net-centric generation" and "neomillennial learner" for today's students. Similarly, Oblinger and Oblinger (2005) call this new generation 'the net generation'.

All these designations for this new generation indicate a change in their learning styles as well. According to Dede (2005) and Baird and Fisher (2005-2006), the learning styles of this new generation is 'neomillenial learning', which stems primarily from the world-to-the-desktop interface. Baird and Fisher (2005-2006) maintain that students

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have started to learn in a student-centered, technologically- and socially-rich environment, which is on the rise.

It is clear that new generation is different from the previous generations, in that, they widely use new technologies not only in their daily lives but also in their learning. The way they communicate and process information reveals that they are comfortable with the new technologies and accustomed to using them readily. They tend to use different kinds of technologies in every part of their lives without any hindrance.

In foreign language teaching, our aim should be catering for these changes in order to make our teaching more compelling and appealing. We should be listening to our learners' voice in order to make our teaching more effective. It is clear that our learners are now more technology oriented and able to utilize new technologies for their learning. In a study investigating student attitudes towards the use of computer-assisted language learning (CALL), and their perceived view of its relevancy to their course of study, Ayres (2002) found that non-native speaker undergraduate students highly appreciated and valued learning through computers. 80% of the students participating in the study perceived CALL to be relevant to their needs, 77% indicated that the computer tasks provided information useful to them and 60% agreed that CALL should be used more frequently. These results indicate that CALL is a tool to supplement the classroom, and needs to be tied into the curriculum closely.

In another study, Conole (2008) found that students use the web extensively to extend their understanding of concepts and supplement course materials. Students are also found to be using technologies such as instant messaging softwares, virtual learning

environments (VLEs), and MS Office Applications to support all aspects of their learning processes such as communicating with tutors, doing assignments and accessing learning materials. Conole points out that students do not see technology as an add-on, rather they take it central to the orientation and organization of their learning suggesting a rich and complex interrelationship between learners and the technologies they use.

All of these changes attest a new lease of life in language teaching and learning that has emerged all around the world. The use of new technologies in foreign language education is now considered to be an essential issue in many institutions which have started to integrate different technologies into their programs. Foreign language learners have already started to experience technology in combination with face-to-face instruction.

The Purpose of the Study

Most language learners now experience technology in combination with face-to-face instruction, therefore; it is important to investigate not only their achievement but also their opinions on the use of different technological tools because this can ensure their success (Zapata& Sagarra, 2008). Besides, Lasagabaster and Sierra (2003) state that "programs need to be used and evaluated not only by designers and teachers, but also by students before their value can be fully determined" (p. 300). Similarly, Kessler and Plakans (2001) indicate that in the process of evaluating materials "learners must be included, as they are also experts of their learning as well as the benefactors of well-

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developed materials" (p. 15). Furthermore, Neumeier (2005) emphasizes the importance of students' attitudes towards learning with the help of technology as these will be of great importance for the future of CALL. It is clear that, being the end-users of the programs, learners' opinions must be considered and valued.

Taking these important aspects into consideration, this study aims to examine the effects of an online learning management system (LMS) called *Macmillan English Campus* (*MEC*) on students' reading, listening, grammar, vocabulary and overall achievement in English. Besides, it also aims to investigate the opinions of the students on the use of *MEC* in English learning during their preparatory year in İstanbul Technical University (ITU) School of Foreign Languages.

The Significance of the Study

The use of LMSs, which include not only administrative aspects such as class rosters and recording of grades but also teaching aspects such as quizzes, learning objects and exercise materials, has become very popular all around the world. Many universities are now offering courses purely online or a blend of face-to-face and online teaching via different commercial or open-source LMSs. The growing number of these institutions shows that LMSs are likely to become as commonplace as the World Wide Web and e-mail occupying an increasing and prominent role in teaching and learning in the near future.

In Turkey, Sakarya University's application to open an undergraduate program with a blended learning structure approved by the Turkish Council of Higher Education in November 2008, which is the first approval for a blended undergraduate program in Turkey, indicates the start of a new era emerged from the importance placed on the flexible delivery of learning. For the future of Turkish higher education, it also shows that similar programs may be approved and be a part of future universities. Apart from this headway in Turkish Higher Education, some universities in Turkey have started to use different LMSs either commercial or open-source to give a blend of face-to-face and online teaching in their courses. Even some universities have started to utilize their own LMSs built by their own staff.

Apart from these advancements, new studies investigating these developments must be conducted. Beatty (2003) indicates that CALL is "constantly undergoing change because of technological innovations that creates opportunities to revisit old findings, to conduct new research and to challenge established beliefs about the ways in which teaching and learning can be carried out" (p.1). There have been a considerable number of studies that have investigated the use of computer applications in language learning since the early 1990s. However, some of these studies have not focused on the use of technology in regular classes, but on the short-term voluntary use of synchronous and asynchronous tools developed specifically for a particular study. As participation in courses in which technology is part of the curriculum and the completion of the tasks are compulsory can shape the learners' opinions on the use of these tools better and, in turn, influence the success or failure of the learners in these courses, it is important to

investigate both the opinions on the use of technology and learner achievement in more depth. Besides, in 1990s, technology was still a novelty in the foreign language classroom, and this might have influenced students' attitudes towards the use of these tools.

Use of LMSs has become popular in language learning, however; it is important to gain insight into the learning outcomes and opinions of our students on the use of these tools in their learning. This study seeks to broaden the existing body of research by examining Turkish learners' opinions on the use of an online LMS called *MEC* and achievement over a 10-week period of time in an environment where the students are required to use the LMS as part of their required courses. This study and its findings with its focus on these two points are valuable because of the aforementioned reasons. Moreover, ITU School of Foreign Languages is planning to start using a LMS in its program. Therefore, this study is important in shedding light on the students' reactions to such a program and the level of their achievement in improving their English in ITU School of Foreign Languages context.

<center>Research Questions</center>

The research questions investigated in this study are:

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1. Does the use of an online learning management system called *Macmillan English Campus* have an effect on English learners' achievement in a university preparatory program?

    a. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their overall achievement?

    b. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their listening achievement?

    c. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their reading achievement?

    d. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their grammar achievement?

    e. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning

management system and those exposed to traditional in-class instruction only

in terms of their vocabulary achievement?

2. What are Turkish university EFL prep-students' opinions on the use of the online

learning management system called *Macmillan English Campus* in their English

learning in a Technical State University?

Definitions of Terms

The terms used in the study are defined below.

A level: In Istanbul Technical University School of Foreign Languages, there are four

divisions of the English proficiency levels in the preparatory program, which are A

level, B level, C level and D level. A level corresponds to the upper-intermediate level,

B level to the intermediate level, C level to the pre-intermediate level and D to the

beginner level. The participants of this study were from the two different A level classes.

Achievement: Achievement in this study refers to students' scores that they got from the

given tests before, during and after the use of *Macmillan English Campus*. The scores in

listening, reading, grammar and vocabulary sections in these tests and overall scores of

these skills show the students' achievement.

Learning Management System (LMS): An LMS, which is a software application, is used

for the administration, documentation, tracking, and reporting of training programs,

classroom and online events, e-learning programs, and training content (Ellis, 2009). It

is used for planning, delivering, and managing learning events within an institution,

including online, virtual classroom, and instructor-led courses. It enables teachers to manage students, keep track of their progress and performance across all types of training activities.

Pacing Schedule: Pacing schedule is the scope and sequence of the program prepared by the Curriculum Office of the School of Foreign Languages.

Student opinions: Student opinions in this study refer to students' thoughts about the use of *Macmillan English Campus* in their English learning. Their thoughts come from the interplay between their previous learning attitudes and the interpretation of *Macmillan English Campus* in learning English.

CHAPTER 2

REVIEW OF LITERATURE

In this chapter, the review of the literature on computer assisted language learning, the role of the computer in language learning, blended learning and summary of the literature will be presented.

Computer Assisted Language Learning

The use of the computer in language learning has now become a conventional and common issue. However, there are different definitions for computer assisted language learning (CALL). Levy (1997) defines CALL as "the search for and the study of applications of the computer in language teaching and learning" (p.1). This definition considers CALL as a broad field which includes not only the use of the computer applications in language teaching and learning but also the investigation and explorations of these applications. On the other hand, Egbert (2005) suggests a basic and straightforward definition. She suggests that CALL means "using computers to support language teaching and learning" (p.3). In this definition, promoting language teaching and learning with the use of computers is emphasized.

Apart from these different definitions, different terms such as computer-enhanced language learning (CELL), and technology-enhanced language learning (TELL) are introduced and used to describe CALL. However, Chapelle (2001) reports that the use of the term CALL for computers in language learning was agreed on by early practitioners who met at the 1983 Teaching of English to Speakers of Other Languages (TESOL) conference.

The origins of CALL traces back to the 1960s when the Programmed Logic/Learning for Automated Teaching Operations (PLATO) system was developed (Beatty, 2003). The significance of PLATO was that it was specifically designed to learn languages, compounding all the best possible CALL attributes available at that time. In the 1960s, CALL was supported by mainframe computers which were connected terminals on a single campus or phone line to terminals off campus. Computer based learning activities called 'courseware' were developed and stored on a mainframe for students to access as they were needed. These mainframe programs were linear in nature and the patterns in these activities were typically like the ones in language workbooks.

During the 1970s and 1980s the rate of advancement in technology began to speed up. In the 1970s, thanks to the mainframe computers and their general-purpose programming languages, basic interaction required to implement the instructional design was supported. In the early 1980s, microcomputers became widely available to language teachers and then, they started to gain considerable attention from teachers and researchers (Chapelle, 2001). In addition, the notion of hypertext, which is a non-linear way of organizing multimedia materials, information and activities, was introduced. By

the late 1980s, CALL had developed through a number of projects such as the Athena Language Learning Project (ALLP), in which materials for teaching a four-course sequence in each of the five languages , namely French, Spanish, Russian, German, and English as a Second Language, taught at Massachusetts Institute of Technology were developed. Artificial intelligence in natural language processing, interactive video and interactive audio components were used (Kramsch, Morgenstern & Murray, 1985). Since then, with the rapid development and convenience of technology, the use of computers in language learning has increased substantially.

In the 1990s, the rapid development from a primarily text-based Internet to the World Wide Web took place. At the beginning, the Internet was limited to one mode, that of written text, we are now no longer limited to a single mode. A combination of different modes, which are namely audio, text and visual, are possible today. Another important feature of the World Wide Web is full use of multimedia applications that go beyond working alone and in one space, which enables us to do more than just retrieve information. Interactive websites enabling interaction among users have been developed as opposed to non-interactive websites providing only passive viewing of information.

CALL has changed so far with the development of the technology. We now have more sophisticated but convenient technology in our classes. The things we can do with the computers are now multifaceted. The World Wide Web and new web tools like weblogs, wikis and podcasts have offered students a variety of authentic resources and a space where they can communicate with each other online and work collaboratively (Richardson, 2009).

By providing extra space, the use of the Internet has freed us from space limitation. We are no longer confined to class boundaries to communicate and to the computer laboratories to learn. We can communicate with our students and they can communicate with us outside the class using different web tools thanks to the Internet, which serves as a space to learn and interact.

Best of all, thanks to the technological developments, we can now easily access to computers and the uses of the different tools do not require us to be tech-savvy. Today's technologies are user-friendly. Hinkelman (2005) predicts that CALL laboratories will disappear and be replaced by ordinary classrooms where non-technically oriented teachers can integrate internet-based activities into a face-to-face setting.

To sum up, with the development of technology, the notion of CALL has changed rapidly since its beginnings with the PLATO project in the 1960s. It has evolved from the mainframes allowing only limited human-computer interaction with the programs presented in a linear manner to sophisticated microcomputers enabling not only human-computer interaction but also human-human interaction in a non-linear environment incorporating different modes of delivery.

The Role of the Computer in Language Learning

It is obvious that the use of the computer in language teaching is affected by the technological changes in time. It is also influenced by the theoretical change in language

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learning and teaching (Richards and Rodgers, 2001). Warschauer (1996b) points out that "the history of CALL suggests that the computer can serve a variety of uses for language teaching" (p. 20). Focusing on the pedagogical aspects, he points out that the computer serves as:

> … a tutor which offers language drills or skill practice; a stimulus for discussion and interaction; or a tool for writing and research. With the advent of the Internet, it can also be a medium of global communication and a source of limitless authentic materials. (p. 20)

Computer's role as a tutor is based on the behavioristic model of CALL, which is derived from the behaviorist theories of learning. The computer in this role serves delivering instructional materials which entails repetitive language drills. Computer as a stimulus and as a tool are based on the communicative model of CALL, which are established on communicative approach to teaching aiming to provide skill practice in a non-drill format. Computer as a stimulus role aims to stimulate learners' critical thinking via such programs as *Sim City* (Coleman, 2002) while computer as a tool aims to empower the learner to use or understand language through such programs as grammar checkers (Park, Palm & Washburn, 1997) and word processing (Li & Cumming, 2001). However, the extension of computer as tutor in a non-drill form is still in use in the communicative model (Virvou & Tsiriga, 2001). The last roles, computer as a medium and a source, are based on the integrative CALL model, which relies on multimedia, computers and the Internet. The multimedia and hypermedia are used to provide authentic materials and communication in these roles (Narciss & Koerndle, 2008).

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Warschauer and Kern (2000) make a similar categorization as well. They point out that the role of computer has changed in language learning and teaching within the shifting context of structural, cognitive and sociocognitive perspectives. They conclude that:

> … the computer can play multiple roles in the language teaching. It originated on the mainframe as a tutor that delivers language drills or skill practice. With the advent of multimedia technology on the personal computer, it serves as a space in which to explore and creatively influence microworlds. And with the development of computer networks, it now serves as a medium of local and global communication and a source of authentic materials. This multiplicity of roles has taken CALL far beyond the early 'electronic workbook' … and has opened up new avenues in foreign language teaching. (p. 13)

The role of computer as tutor is the earliest form that reflects the structural approaches to CALL, which emphasized the repeated drilling on the same material. In this role, the computer was used to provide grammar and vocabulary tutorials, drill and practice programs and language testing programs. Although this role is the earliest from, it is still used today. However, the form of the exercises has changed a lot. The grammar and vocabulary exercises have been freed from drills and integrated into listening, reading and writing resources presented in a multimedia environment (Busch, 2003; Hegelheimer & Tower, 2004). These activities are now presented in a meaning-focused environment.

The role of the computer as a space to explore and interact reflects the effects of constructivist approaches to CALL, which puts learners in an active stance in learning constructing knowledge through exploration (Ohmaye, 1998). Like the earliest role of

the computer, this role is still in use serving a more sophisticated space where learners

engage in 3D virtual worlds such as *Second Life* to explore and interact (Stevens, 2006).

Today's programs bestow avatars which provide new identities in a new virtual world.

New programs now enable the interaction between different avatars as well, which

exemplifies the incorporation of the third role of the computer as a medium of local and

global communication into the second role.

The third role of the computer as a medium of local and global communication

and a source of authentic materials reflects the sociocognitive approaches, which

encompasses human interaction via computers (Hamilton, 2009). This role which was

initially limited to written mode now enables visual synchronous real time interactive

human communication (Acar, 2007; Ciekanski& Chanier, 2008). Besides, World Wide

Web is now a rich resource of authentic materials (Shetzer& Warschauer, 2000; Hanson-

Smith, Egbert& Buell, 2007). Using the World Wide Web, students can search and reach

millions of authentic materials such as newspaper articles, podcasts, videos, movie

reviews and book excerpts.

Another congruent categorization of the roles of the computer has been made by

Fotos and Browne (2004). They put the use of the computer in language learning into

four categories reflecting the evolving nature of the computers in time and language

learning theory. The first use is the considered as 'behavioristic CALL', which

encompasses drill-and-practise programs to supplement classroom instruction in

language labs. The second use is considered as 'communicative CALL', which

emphasizes the meaning-focused language via the programs including language games,

puzzles, reading and writing practice, text reconstruction and cloze tests. The third use which embodies the cognitive models of language learning reflects the computer as stimulus which facilitated understanding and manipulation of target language via tools such as word processors and concordencers (Flowerdew, 1996; Yoon& Hirvela, 2004). The last use is called 'integrative CALL', which is interactive, and individualized by flexible and self-paced access to information (Chun and Plass, 2000).

Warschauer (2004) also groups the transformation of the computer use in language learning into three stages as structural, communicative and integrative, which reflects the technologic and pedagogic progress of CALL. The structural stage focuses on the accuracy via drill and practice. The communicative stage focuses on fluency via communicative exercises. The integrative stage places the computer in a role as an agent providing authentic discourse in paradigms such as English for Academic purposes.

Throughout the period of change taking place in the computer use in language teaching and learning, it should be noted that the introduction of a new phase does not necessarily entail rejecting the programs and methods of a previous phase. It seems that the new role can subsume the previous. In addition, it should be paid attention that a new role does not gain prominence all at once while the previous pass out of use abruptly. The new roles has gained acceptance evolving slowly and unevenly.

Considering all these aforementioned roles of the computer, the question of which role to employ to make language teaching more effective arises. However, there is no single answer to this question. Levy (2006) highlights that effective CALL makes it necessary for an instructor to locate the optimal balance of approaches, resources and

tools in a way that meets the needs of particular learners in a given context at a particular time. Therefore, it is necessary for practitioners and researchers to look for a balanced approach employing suitable roles to their learner needs and context.

Blended Learning

The change in the role of the computer not only reflects the change in teaching and learning paradigms but also forms news paradigms in teaching and learning. Warschauer and Kern (2000) maintain that networked computers are helping to create new paradigms of teaching and learning as well as serving them. One of these paradigms is called blended learning, which is also referred as hybrid learning (Desmarais, 2008; Wong, 2008).

Driscoll (2002) indicates that blended learning can mean different things to different people. She mentions four different meanings. It can mean to combine different web-based technologies, or to combine different pedagogical approaches, or to combine any form of instructional technology with face-to-face instructor-led training, or to combine instructional technology with actual job tasks in order to improve learning transfer. According to her, blended learning serves primarily as a strategy to help start e-learning in organizations from traditional classrooms in small steps making change easier to accept.

Oliver and Trigwell (2005), similarly, identify three meanings for the term blended learning. The first definition is the integrated combination of traditional learning

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with web-based online approaches. The second meaning is the combination of media

and tools employed in an e-learning environment, and the last meaning the combination

of a number of pedagogic approaches, irrespective of learning technology use. They

recommend that the term blended learning should be redeemed by focusing on the

variation in the experience of the learner.

Leakey and Ranchoux (2006) propose a CALL-based definition of blended

learning. They define blended learning in CALL as:

> … the adaptation in a local context of previous CALL and non-CALL
> pedagogies into an integrated program of language teaching and learning
> drawing on different mixes of media and delivery to produce an optimum mix
> that addresses the unique needs and demands of that context. (p.358)

Blended learning here requires the integration of different CALL pedagogies to the

conventional face-to-face teaching and learning context. In this definition, the type of

media is not specified. It may mean the use of self-paced web-based courses or the use

of different language practice software on CD-ROMs. However, the important issue

pointed out is to find the optimum blend suitable for different needs and context.

Littlejohn and Pegler (2007) states that blending centers on the integration of

different types of resources and activities in a learning environments, which implies the

combination of a number of teaching and learning approaches irrespective of the

technology used. However, they indicate that the term blended learning is increasingly

used to describe hybrid model of e-learning, which they define as the use of computers

and the Internet for learning. This means the coexistence of traditional face-to-face teaching methods and newer e-learning activities and resources in a single course.

It seems that blended learning is a term which is both simple and complex. Simplicity of it mainly derives from the consensus on the integration of some kind of technology. The complexity seems to derive from the fact that, in its implementation, there are limitless possibilities in medium and design and applicability in different contexts. However, it seems that the most contemporary and comprehensive definition encompasses the integration of online tools and materials with traditional face-to-face learning (Klímová, 2009).

Different Models of Blending

Neumeier (2005) states that the "approach of blending CALL applications with face-to-face teaching is as old as CALL itself" and "most language learners experience CALL within a blended learning environment" (p. 163). However, the planning and design of effective blended learning practices can be challenging and demanding. To what extent to use technology and when to integrate are important questions in blended learning.

When considering blended learning, there is, of course, no single perfect blend because it is grounded on the notion of flexibility. Allan (2007) places blended learning on a continuum where totally online learning is placed on the one end and pure face-to-face learning is placed on the other. This reveals that there are myriad combinations that can be used in blended learning environments today. The most important aim of blended

learning design is to find the most effective and efficient combination of the two modes of learning for the individual learning subjects, contexts and objectives (Neumeier, 2005).

Sharpe, Benfield, Roberts and Francis (2006) categorize blended learning into three distinct models based on their review of the existing research and practice on blended learning in higher education in the United Kingdom. The first model is blended learning as a supplement to traditional programs. In this model, technology is used to supplement face-to-face learning. The most widespread use of technology to be adopted by higher education institutions to supplement face-to-face programs in the last decade is the use of learning management systems (LMSs), which offer a template-based system into a course framework (Godwin-Jones, 2003). The common uses of LMSs are to supplement on-campus studies and to do this by providing course information and access to web resources. This model is referred as 'wraparound' activity blending by Littlejohn and Pegler (2007, p.30). In this model, face-to-face activities are wrapped around online activities or resources and vice versa. The important issue to make sure is that resources are presented in a related manner to complement each other.

The second model is a transformative approach in education. In this model, new courses are designed or previously existing courses are redesigned to integrate a wide range of approaches to learning and teaching suitable to the learners and the context (Gregorio-Godeo, 2005). In this model, the extensive use of different technologies integrated into the courses to enhance how students study, interact and learn is emphasized. In order to provide an effective program, a carefully balanced mixture of

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learning activities must be designed and developed. This will enable learners to explore new ideas and develop their knowledge and skills in a safe environment either face-to-face or online.

The final model is a holistic view of technology use to support learning. This model includes the use of the learners' own technologies such as mobile phones, online communities, and instant messaging to support their learning; therefore, it can be considered as a learner-led approach. However, this third characterization of blended learning seems to be for the most part aspirational and inspirational rather than evident in institutional practice.

Apart from these models, Motteram and Sharma (2009) identify four models of blended learning examining different definitions and practices of blended learning. The first model involves integration of face-to-face instruction and online tools. This approach typically involves using a LMS which enables posting of materials for study before and/or after the language class.

The second model involves combination of technologies. This model might describe a purely distance learning course, where no face-to-face lessons occur. Communication between the learners and teachers may take place through any number of combinations of technology without any face-to-face contact.

The third model involves the combination of a number of pedagogic approaches, irrespective of the learning technology used. This model is less relevant to the contemporary practice and definition because it does not make specific reference to the technologies employed by the teacher or learner.

The fourth model involves the combination of real world and virtual world. Motteram and Sharma (2009) indicate that this model has been employed by one language school in Germany. The teacher and the students first have face-to-face lessons and then they arrange to meet in a virtual world such as *Second Life* for a follow-up lesson.

Having a different perspective on blended learning, Littlejohn and Pegler (2007) states that it is possible to think of blends in two ways: 'media blend' and 'activity blend' (p.29). In media blend, different web tools such as podcast or videos can be integrated into face-to-face instruction. The use of different tools can be either supplementary or compulsory. Activity blend involves the way in which online and face-to-face activities are used together. In activity blend, the important issue is to decide on where to conduct what activities.

Allan (2007) maintains that there is no prescription for designing effective blended learning programs. She suggests that alternating modes of delivery, which involves successive face-to-face and e-learning sessions or vice versa from start to the end, can be a way to blend. Another technique she puts forward is to use a storyboard. It involves an outline of the learning process presented along a time line with an indication of the face-to-face and online activities that takes place at any stage in the program. The important point in these techniques she indicates is that design cycle should involve needs analysis, design, development, delivery and evaluation because the success of blended learning depends on researching and responding to the needs of the learners and context (Liang& Bonk, 2009).

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Littlejohn and Pegler (2007) express that "there is no perfect blend for a specific context" (p. 71). Considering different plausible models, it must be noted that careful thinking and planning of the patterns in which each of the individual components complement and affect one another are important issues. The important consideration in blended learning is to ensure that the blend involves the strengths of both face-to-face and online learning environments to "make the lesson easier or more effective" (Silverwood, 2007; p. 119).

Benefits of Blended Learning

Innovative uses of technology have begun to blur the distinctions between traditional face-to-face and more recent distance learning environments. On the one hand, there is the traditional face-to-face learning environment that has been around for centuries. On the other hand, there are online environments that have begun to expand the possibilities for online communication and learning. The expansion of online environments into language classrooms is now welcome to provide a better teaching and learning experience. Osguthorpe and Graham (2003) indicate that as the learning environments have been combined, the inherent strengths and weaknesses associated with both have been recognized. The aim in blended learning is to combine the benefits of these two environments in a harmonious way.

A significant advantage of a blended program is the ability to cater for different learner needs. It compensates for student differences in experience with content,

realizing that some students had prior experience with the material and, thus, might not have to review the material as much as other novices. On the other hand, an individual could receive additional information and training through extra online learning programs while still attending in-class training with other students. Students who need more practice can have that opportunity without taking face-to-face class time away from those who might not need the extra practice. Being able to review online resources as often or as much as needed can be a strategy by which to address varying learning styles or needs of those who might need extra practice. This creates a more learner-centered environment for students.

Another benefit of blended learning is that it increases the options for greater quality and quantity of human interaction in a learning environment. Blended learning offers learners the opportunity "to be both together and apart" (Garrison& Kanuka, 2004, p.96). This means that learners and teachers can be connected to a community of learners anytime and anywhere, without being time, place, or situation bound. A community of learners can interact at anytime and anywhere because of the benefits that computer-assisted educational web tools provide. Blended learning provides a 'good' mix of technologies and interactions, resulting in a socially supported and constructive learning experience.

Distance programs, in which learners study online without having any face-to-face instruction, have become very popular among working adults because of the time flexibility these programs provide. However, these programs often suffer from limited human interaction. When interaction does not occur, it tends to be less spontaneous than

face-to-face communication. This seems to reduce learner motivation and eventually cause drop outs (Felix, 2003). Blended learning can be a solution to motivate students by bringing them together in an environment where they can question and experiment together. Besides, Garrison and Vaughan (2008) indicates that even though this generation of students is very open to computer-mediated education and value social interactions and collaborative learning, they also view the teacher as a critical element of the learning experience and are concerned that technology will reduce communication between students and the teacher.

Blending provides various benefits over using any single learning delivery mode alone. The definitions of blended learning reveal that there are two major modes, CALL and face-to-face delivery, in shaping the learning process. Lee and Chan (2008) suggest that web-based technology should be used as communication tools and collaborative tools to facilitate interactions among the student, peer learners and the teachers throughout the whole learning process for co-construction of knowledge. This will allow for the implementation of different language learning methodologies and the formation of different social settings and help to facilitate face-to-face learning.

As blended learning refers to a mixing of different learning environments, it is clear that it gives learners a larger space to learn and teachers to teach more effectively. They are not confined to class boundaries any more. While teachers can help students any time by sending extra resources, students can access the materials at any time of day and review them as needed, which provides them with increased flexibility. Ortega and Sánchez-Villalón (2006), establishing the basis for blended environments in An

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Interactive Online Learning Environment (AIOLE), aims to integrate technological paradigms such as ubiquitous computing and wireless Web technologies for language learning to favor the textual exchange of information anywhere at any time. The end result is a learning environment where students can be actively engaged and potentially learning more than in a traditional on-campus classroom.

Singh (2003) points out that the concept of blended learning is rooted in the idea that learning is not just a one-time event; learning is a continuous process. In-class teaching on its own requires learners participate in lessons at a fixed time, which limits the access. However, learning does not occur only in class. In blended learning, apart from the class instruction, learners can reach learning materials and teachers via different web tools outside the class.

It is clear that blended learning serves a purpose in language teaching and learning. The combination of face-to-face instruction environment with the online environment within the same course allows not only capitalizing on the advantages of each but also catering for diverse learning styles and needs of different students. Allan (2007) suggests that blended learning "appears to offer the opportunity to combine the best of a number of worlds in constructing a program that fits the particular needs in terms of time, space and technologies of a particular group of students or end-users" (p.8). To put in a nutshell, blended learning seems to be the most efficient way providing a mix of environments, integration of technologies and increased interactions with its flexibility of time and space, resulting in a socially supported environment and constructive learning experience.

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Learner Achievement in Blended Learning

In the 1990s, the application of CALL tools for foreign language teaching and learning gave rise to a number of studies that investigated the impact of the new tools on student attitudes and language learning (Kern, 1995; Murray, 1999; Warschauer, 1996a). Since then, different studies (Dewar & Whittington, 2004; Shank 2007, MacDonald, 2008) have shown that blended learning has become the most popular model of CALL use in foreign language learning recently, in language programs where CALL components can provide face-to-face instruction with an "efficient use of human and material resources" (Salaberry, 2001, p.51).

In a study investigating the effects of integrating web-based instruction into the in-class instruction on writing achievement of university EFL freshman students exposed to traditional in-class writing instruction depending on the textbook only, and those exposed to a combination of traditional in-class writing instruction and web-based instruction, Al-Jarf (2004) finds out that the students who were taught using a combination of web-based writing instruction and traditional in-class writing instruction were more successful than those who was taught using traditional in-class writing instruction depending on the textbook only. Apart from this positive achievement results, the questionnaire results suggest that use of technology had a positive effect on students' attitude towards the writing process as it was perceived to enhance their self-esteem, motivation and sense of achievement and improvement.

In another study, Al-Jarf (2005) investigates whether the integration of online learning into face-to-face in-class grammar instruction significantly improves university EFL freshman students' achievement and attitudes by comparing two groups of university freshman students. The result of the study reveals that the group following online instruction with *Nicenet* in addition to face-to-face in-class grammar instruction outperformed the group having only face-to-face in-class grammar instruction. The study concluded that use of an online course from home as a supplement to in-class techniques helps motivate and enhance EFL students' learning and mastery of English grammar.

In a pilot study conducted in an English teaching program implementing blended learning model, Bañados (2006) investigates students' learning and satisfaction. The program combines learners' independent work on a web platform called *UdeC English Online*, face-to-face EFL classes led by teachers who are also students' online tutors, online monitoring carried out by these teachers, and weekly conversation classes with native speakers of English. The results of the study show a substantial improvement in the students' language skills, as well as high satisfaction levels with the program.

In a similar study, Son (2007) investigates the students' perceptions and attitudes toward the two types of web activities, pre-created and task-based, integrated into an intensive English language course for overseas students. Pre-created web activities are the language exercises that are already available and easily accessible on the web and task-based web activities requires exploiting web resources to produce certain outcomes through language tasks such as communications, information collections or problem

solving projects. The results of the study reveal that the students seemed to enjoy all web activities although they tended to consider the pre-created activities slightly more useful than the task-based activities. With regard to language learning outcomes, most students perceived that both the pre-created and task-based web activities contributed to their language learning. With positive attitudes toward web activities in general, most students agreed that they would like to have web activities as a regular part of their language course. He concludes that the web is a useful tool and a supplementary resource for learning ESL as it provides an extensive range of authentic materials as well as a more learner-centered medium of instruction, which can complement classroom-based activities.

In a case study, Pazio (2010) investigates the effects of blended learning on students' vocabulary development with a case study. In the study, the element that was blended within the face-to-face component was asynchronous computer mediated communication in the form of e-mail exchanges between a native speaker of English and a Polish learner of English. The findings reveals that e-mail correspondence treated as an integral part of a language course helped the student to expand her vocabulary, eliminate the majority of her spelling mistakes and influenced the complexity of her writing.

However, contrary to the satisfaction results of the previously mentioned studies, Stracke (2007) investigates blended learning environment from the learners' perspective and focuses on three learners who dropped out of two Spanish and French as a second language classes. The 'blend' in the study consisted of learners' independent self-study phases at a computer, with a CD-ROM, and traditional face-to-face classroom learning.

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She points out that the main reasons behind their decision had been lack of instructor support and print material and failure to see a connection between face-to-face instruction and CALL components. She suggests there is a need to carefully plan this type of course, providing students with comprehensive teacher and document guidance and ensuring transparent connections between the two modes of instruction.

Findings of the studies conducted in 2000s on learners' outcome of blended learning in their foreign language learning are mostly positive indicating improved student achievement and satisfaction with their learning experience. It also seems that blending face-to-face instruction with different CALL applications help students improve their learning.

Summary

From the 1960s until today, the use of the computer in language teaching and learning has gone through a big change not only with the development of the technology but also with the shifts occurring in learning and teaching approaches. Beatty (2003) indicates that "because of the changing nature of computers, CALL is an amorphous or unstructured discipline, constantly evolving both in terms of pedagogy and technological advances in hardware and software" (p.8). The mainframe computers have now turned into sophisticated personal computers. The computer which provided drill and repetition practice as a tutor now serves as an agent providing learner-leaner, learner-teacher and teacher-learner interaction and communication via different web tools. Besides, it serves

as a tool supplying a great variety of authentic resources thanks to the Internet. The immediate availability of data, information, and knowledge to students is astounding.

Combining in-class instruction with CALL programs or Internet activities via different web tools has been proved to be beneficial over only face-to-face instruction or entirely online courses. The integration or blending the conventional face-to-face teaching with the use of online tools seems to improve students' learning engagement and ability to communicate effectively. However, it must be noted that, in order to achieve an effective blending, combination of different modes of delivery and methods of teaching should be developed based on the needs of the students and context of teaching.

CHAPTER 3

METHODOLOGY

In this chapter, the methodology employed in this study will be presented. Overall design of the study, research questions, participants, setting, data collection instruments, data collection procedures and data analysis will be described.

Overall Design of the Study

The aim of this study is to explore the effects of an online learning management system (LMS) called *Macmillan English Campus* (*MEC*) on the achievement and opinions of Turkish preparatory students studying English as a foreign language in a Technical State University. In order to realize this aim, the study employed a quasi-experimental design within the quantitative research paradigm. The design of this research is a non-equivalent control class with pre-test and post-test design (Lynch, 1996).

The aim of employing this methodology in this study is to find out whether the use of an online LMS called *MEC* would cause a difference in the achievement of Turkish preparatory students in a Technical State University. The design of this study is presented in Table 1.

Table 1. The Design of the Study

	Pre-test	Treatment	Post-test
Experimental Group	Achievement Exam (Listening, grammar, vocabulary, reading)	*Macmillan English Campus* Progress Test (Listening, grammar, vocabulary, reading)	Cumulative Exam II (Listening, grammar, vocabulary, reading)
Control Group	Achievement Exam (Listening, grammar, vocabulary, reading)	In-class teaching only (no online materials) Progress Test (Listening, grammar, vocabulary, reading)	Cumulative Exam II (Listening, grammar, vocabulary, reading)

In this study, two A level prep classes, each consisting of 36 Turkish EFL students in İstanbul Technical University (ITU) School of Foreign Languages, were assigned as experimental and control groups. The students in both classes were given a pre-test, Achievement Exam, just before the treatment started in order to find out any possible preexisting differences in their achievement.

In the experimental class, there were two teachers; one was the researcher as the integrated skills course teacher and the other was the basic course teacher. During the study, apart from the requirements of the curriculum of the school, namely the units and assignments in weekly pacing schedules which were required to be adhered by all the teachers in school, the researcher as the integrated skills course teacher and the basic course teacher used an online LMS called *MEC* in their instructions and assigned resources as supplementary from *MEC* in the experimental class. The supplementary resources were selected by each teacher independently based on the program that they

had to follow. The aim of using this system as part of the course work was to practise and revise the language skills learnt in the class.

In the control class, there are two teachers; one was the integrated skills course teacher and the other was the basic course teacher. The integrated skills course teacher was a native speaker of English. The control class did not use any kind of online program as part of their course work during the study. The teachers in the control class followed only the units and assignments announced in weekly pacing schedules.

In order to see the progress in students' achievement, students were given a progress test, Cumulative Exam I, on the fifth week of the study. The study lasted 10 weeks. At the end of the study, the students both in the experimental and control classes were given a post-test, Cumulative Exam II, in order to find out whether there was a difference between their achievement. After the post test, the students in the experimental class were also given a student questionnaire so that the researcher could explore their opinions of the use of *MEC* in their learning.

Research Questions

The research questions investigated in this study were:

1. Does the use of an online learning management system called *Macmillan English Campus* have an effect on English learners' achievement in a university preparatory program?

a. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their overall achievement?

b. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their listening achievement?

c. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their reading achievement?

d. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their grammar achievement?

e. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their vocabulary achievement?

2. What are Turkish university EFL prep-students' opinions on the use of the online learning management system called *Macmillan English Campus* in their English learning in a Technical State University?

Definitions and Measurements of Variables

There are mainly two research questions investigated in this study. The first research question, which investigates whether the use of an online LMS called *MEC* has an effect on Turkish university EFL prep-students' achievement in a Technical State University, has five sub-questions, aiming to investigate the achievement of students in terms of overall, listening, reading, grammar and vocabulary achievement.

The independent variable in this study is the teaching method. The treatment is the use of an online LMS called *MEC*.

The dependent variables are the students' overall achievement, listening achievement, reading achievement, grammar achievement and vocabulary achievement. They are all continuous variables. The achievement of the students was measured with a pre-test, progress test and post-test.

Participants

The participants of this study were 2 different A level classes, each of which consisted of 36 Turkish EFL students, in ITU School of Foreign Languages. There was a total of

72 Turkish EFL prep students in this study. There were six A level classes during the time of the study in ITU School of Foreign Languages. The students were assigned to classes randomly based on the scores they got from the placement test which was given before the academic year started. The experimental class was determined based on random assignment while the control class was determined based on convenience. Students in both classes were given a background questionnaire in order to find out their demographic information, educational background, computer literacy and use of internet and facilities that they had.

The results of the background questionnaire revealed that the average age of the students in the experimental class was 18.25 with a standard deviation of .69. In the control class, the average age of the students was 18.32 with a standard deviation of .74. There were 36 students, 21 male and 15 female, in the experimental class and 37 students, 21 male and 16 female, in the control class. One of the male students in the control class was an international student; therefore, his test results' were excluded from the achievement scores as this study aims to find out the effect of the online LMS on Turkish EFL prep students' achievement in a Turkish State University.

The types of high school that students in the experimental and control class graduated from are given in Table 2.

Table 2. Types of High Schools

High School	Experimental Class		Control Class	
	n	%	n	%
State High School	1	2.8	2	5.4
Anatolian High School	27	75.0	27	73.0
Science High School	2	5.6	4	10.8
Private High School	1	2.8	2	5.4
Private Science High School	4	11.1	0	.0
Military High School	1	2.8	0	.0
Anatolian Teacher Training High School	0	.0	1	2.7
Super High School	0	.0	1	2.7
Total	36	100.0	37	100.0

Majority of the students in both classes studied high school in an Anatolian High School. In the experimental class, there were students graduating from State High School, Science High School, Private Science High School, Private High School and Military High School. In the control class, there were students graduating from State High School, Science High School, Private High School, Anatolian Teacher Training High School and Super High School.

All of the students in both experimental and control classes studied English in high school or secondary school before they started preparatory program in ITU School of Foreign Languages. The average years of English instruction received before starting the university was 9.25 for the experimental class with a standard deviation of 1.29 and for the control class, 8.72 with a standard deviation of 1.40.

However, the number of students taking a preparatory class before starting ITU preparatory program differs. Table 3 shows the students taking preparatory class before they started university either in high school or secondary school.

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Table 3. Students Taking Preparatory Class

Prep Class		Experimental Class		Control Class	
		n	%	n	%
	Yes	10	27.8	16	43.2
	No	26	72.2	21	56.8
	Total	36	100.0	37	100.0

In the experimental class, nearly three quarters of the students had not taken an English preparatory class before they started university. In the control class, more than half of the students had not taken an English preparatory class before in high school or secondary school. In the control class, the ratio of students taking an English prep class before was more than the ratio of students taking a prep class before in the experimental class.

By the time the study started, the majority of the students had a computer and internet connection. In Table 4, the number of students having a computer and internet connection is presented.

Table 4. Students Having a Computer and Internet Connection

	Experimental Class						Control Class					
	Yes		No		Total		Yes		No		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Having a Computer	30	83.3	6	16.7	36	100.0	34	91.9	3	8.1	37	100.0
Internet Connection	33	91.7	3	8.3	36	100.0	35	94.6	2	5.4	37	100.0

In the experimental class, 30 students had their own computers and 33 students had internet connection. In the experimental class, 3 students who did not have a personal

computer before the study bought a laptop during the study. In the control class, 34

students had their own computers and 35 students had internet connection. The average

years of having a personal computer is 7.25 with a standard deviation of 4.48 in the

experimental class and 6.48 with a standard deviation of 4.27 in the control class at the

beginning of the study.

Students' opinions on their computer knowledge, web browser expertise and

typing ability were measured with a Likert type 5-point-scale. The options were poor

(1), fair (2), good (3), very good (4), and excellent (5). The results are given in Table 5.

Table 5. Computer Literacy

Computer Literacy	Experimental Class											
	Poor		Fair		Good		Very good		Excellent		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Computer Knowledge	0	.0	2	5.6	19	52.8	13	36.1	2	5.6	36	100.0
Web browser expertise	0	.0	4	11.1	11	30.6	16	44.4	5	13.9	36	100.0
Typing ability	1	2.8	2	5.6	8	22.2	22	61.1	3	8.3	36	100.0
Computer Literacy	Control Class											
	Poor		Fair		Good		Very good		Excellent		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Computer Knowledge	0	.0	8	21.6	22	59.5	5	13.5	2	5.4	37	100.0
Web browser expertise	0	.0	5	13.5	14	37.8	17	45.9	1	2.7	37	100.0
Typing ability	0	.0	0	.0	19	51.4	14	37.8	4	10.8	37	100.0

In the experimental class, the average of students' computer knowledge is 3.42 with a

standard deviation of .69 and web browser expertise 3.61 with a standard deviation of

.87 and typing ability 3.67 with a standard deviation of .83. Similarly, in the control

class, the average of students' computer knowledge is 3.03 with a standard deviation of

.76 and web browser expertise 3.38 with a standard deviation of .76 and typing ability

3.67 with a standard deviation of .69. It is clear that on average the students in both

classes are good at computer, which confirms the computer literacy of the students in

both classes.

The use of World Wide Web (WWW), e-mail, chat, social networking, weblog

and learning management system (LMS) was measured with a Likert type 3-point-scale.

The options were a lot, a little and never. The results are given in Table 6.

Table 6. Use of Internet

Use of Internet	Experimental Class							
	A lot		A little		Never		Total	
	n	%	n	%	n	%	n	%
WWW	36	100.0	0	.0	0	0	36	100.0
E-mail	22	61.1	14	38.9	0	.0	36	100.0
Chat	24	66.7	12	33.3	0	.0	36	100.0
Social networking	24	66.7	10	27.8	2	5.6	36	100.0
Weblog	3	8.3	13	36.1	20	55.6	36	100.0
LMS	0	.0	0	.0	36	100.0	36	100.0
	Control Class							
	A lot		A little		Never		Total	
	n	%	n	%	n	%	n	%
WWW	27	73.0	10	27.0	0	.0	37	100.0
E-mail	29	78.4	8	21.6	0	.0	37	100.0
Chat	28	75.7	9	24.3	0	.0	37	100.0
Social networking	20	54.1	13	35.1	4	10.8	37	100.0

Table 6. continued

Weblog	4	10.8	14	37.8	19	51.4	37	100.0
LMS	0	.0	0	.0	37	100.0	37	100.0

All of the students in both classes used the Internet. In the experimental class, all the students use the World Wide Web a lot. Most of them, two thirds, use e-mail, chat and social networking a lot. However, only one thirds of them use weblogs a lot. In the control class, most of the students use World Wide Web, e-mail, chat and social networking a lot. Similar to the experimental class, very few of them use weblogs. In both classes, none of the students had used a learning management system (LMS) before the study.

Setting

At Istanbul Technical University, a one-year preparatory English program is compulsory for all undergraduate students who do not meet the English language proficiency requirements. The academic year in the School of Foreign Languages consists of 2 terms (8 months in total), each composed of 15 or 16 weeks.

The number of students that the School of Foreign Languages serves is increasing every year. During the time of the study, there were more than 2600 students in the English Preparatory Program for Undergraduate students. To provide services to students outside of class, the school building is equipped with a student computer lab with Internet connection, and a library with a rich collection of books.

Since the medium of instruction in the faculties is either 30% or 100% English, learning occurs through the implementation of two different English Preparatory Programs: Undergraduate Preparatory Program and Dual Degree Preparatory Program. This study took place in the Undergraduate Preparatory Program. The students studying in this program will study 30% of the courses in their faculties in English, which means the medium of the instruction in 30% of the course load is English.

Students enrolled in İstanbul Technical University take the Proficiency Exam prepared by the School of Foreign Languages, which is assumed to be equivalent to 500 on the TOEFL PBT, 60 on the TOEFL IBT or 6 on the IELTS taken within the past two years. The students whose Proficiency Exam scores are 60 or above out of 100 can start their education in their faculties. The students whose scores are below 60 have to study in the preparatory program for one or two terms. Thus, they take the placement exam so that they can be placed in the right level in the prep program. For each level in the prep program, the total number of allocated hours differs depending on the language proficiency of the students.

EFL courses at ITU School of Foreign Languages are offered at four levels, A level (upper-intermediate level), B level (intermediate level), C level (pre-intermediate level) and D level (beginner level). The students at all levels receive The Basic English course and The Integrated Skills course. The Basic English course focuses mainly on developing grammar while the Integrated Skills course is comprised of reading, writing and listening instruction. In these courses, students study course books prepared by the

foreign commercial publishers and compiled materials prepared by the instructors of ITU School of Foreign Languages.

This study was carried out in the fall term in 2009/2010 academic year. The participants were students from two A level classes who had 18 hours of compulsory instruction per week. In the prep program for this level, students had 6 hours of Basic English course, 12 hours of Integrated Skills course, which was made up of 6 hours of reading, 4 hours of writing, and 2 hours of listening instruction per week. The students at this level studied a course book, *Language Leader Upper-Intermediate* by Longman, in the Basic English. In the Integrated Skills course, *Active Reading 3* by Thomson& Heinle, *Contemporary Topics 2* by Longman and *From Paragraph to Essay* were studied. The writing book, *From Paragraph to Essay*, is a complied material prepared by the instructors in ITU School of Foreign Languages.

Data Collection Instruments

The instruments used for the data collection were the background questionnaire, pre-test, progress test, post-test, and student questionnaire.

Background Questionnaire

The students in both experimental and control classes were given a background questionnaire, which was made up of 14 items, at the beginning of the study in

2009/2010 academic year fall term in order to find out their demographic information, educational background, computer literacy and use of internet and facilities that they had (Appendix A).

The background questionnaire was administered by the researcher in the experimental class and by the integrated skills course teacher in the control class. It was administered to both classes just before the pre-test. It took 10 minutes for the students to fill it out. The questionnaires were collected by the teachers administering it.

Tests: Pre-test, Progress test and Post-test

The students in the experimental and control classes were given a pre-test, Achievement Exam, before the treatment started in order to find out whether there was any preexisting difference in their achievement. On the fifth week of the study, they were given a progress test, Cumulative Exam I, in order to find out their progress. At the end of the study, they were given a post-test, Cumulative Exam II, in order to find out whether there was any difference in their listening, grammar, vocabulary, reading and overall achievement.

The pre-test was prepared by the researcher with the supervision of the Test Office coordinator of ITU School of Foreign Languages and administered by the integrated course teachers. However, the progress test and post-test were prepared and administered by the Test Office.

The administration of all the tests to both the experimental and the control class was on the same day at the same time. The pre-test was proctored by the researcher as the integrated skills course teacher in the experimental class. The control class was proctored by their own integrated skills course teacher during the test. In order to be consistent in the test administration, the researcher and the control class integrated skills course teacher had a meeting before the pre-test regarding the test administration instructions. In the progress test and post-test, teachers assigned by the Test Office proctored the tests in each class. In order to ensure the consistency in test administration, the proctors were given test administration instructions before the tests.

All the tests were comprised of listening, grammar, vocabulary and reading sections. However, different from the pre-test, there was a writing section in the progress test and post-test. Because the study aimed to find out the difference in the achievement of listening, grammar, vocabulary, reading and overall achievement, the scores of the writing section were excluded from the total grade of the students. The duration of the pre-test was 90 minutes while the duration of the progress test and post-test was 120 minutes including the writing section.

The pre-test papers of both experimental and control classes were graded based on the answer key provided by the Test Office and the grades were recorded by the researcher while the progress test and post-test papers were graded by the class teachers assigned by the Test Office. In order to make grading consistent, the answer key and grading instructions were also provided by the Test Office to grader teachers.

In all the tests, the listening section was in the form of note-taking. The students were given note-taking sheets to take notes before the exam booklets were distributed. In the pre-test, the listening text was read out by the proctors in each class while in the progress test and post test, the listening text which was recorded on a CD by the Test Office was played with a CD player. The listening text in the pre-test was a lecture on Amelia Earhart's life. There were 8 multiple choice items which made up 16 points. In the progress test, the listening text was a lecture on exercising. There were 4 multiple choice items and 5 gap-fill items which made up 18 points. In the post-test, the listening text was a lecture on how to improve memory. There were 6 gap-fill items which made up 12 points.

In the pre-test, the grammar and vocabulary were measured in 3 cloze texts with multiple choice items. The first text was about dealing with bad dreams and nightmares, the second on Feng Shui and the last one on witchcraft and superstitions. There were 15 grammar items which made up 30 points and 7 vocabulary items which made up 14 points. All the items in the pre-test were multiple-choice. In the progress test, the grammar was measured with 2 cloze texts. The first text was about a schizophrenic person and the second on doctor-patient relationship. There were 18 multiple choice grammar items which made up 27 points. The vocabulary section consisted of 8 gap-fill items which made up 12 points. In the post-test, the grammar was measured with a cloze text which was about addicts in stock market. There were 14 multiple choice grammar items which made up 21 points. Besides, in the grammar section, there was a rewrite section which consisted of 4 items making up 10 points. The grammar section was 31

points in total. The vocabulary section consisted of 10 gap-fill items which made up 15 points.

In reading section of the pre-test, there was a reading text with 570 words on a kind of drug which constituted a problem in Thailand. There were 10 multiple choice items, 7 of which were comprehension questions and 3 guessing meaning from context. The reading section was 20 points. In the progress test, there was a reading text with 520 words on the importance of taking precautions to save our world. There were 4 multiple choice items, all of which were comprehension questions, 2 gap-fill items, and 4 finding words from the text. The reading section was 25 points. In the post-test, there was a reading text with 536words on the generally misunderstood nature of photography. There were 7 multiple choice items, 4 of which were comprehension questions, one reference question and 2 guessing meaning from context questions. Besides, there were 2 open-ended questions. The reading section was 22 points.

Student Questionnaire

The students in the experimental class were given a student questionnaire at the end of the study in order to find out their opinions of the use of the online LMS called *MEC* in their English learning in English preparatory program (Appendix B). The questionnaire was developed by the researcher in English for this study. It was given in English to the students, as all the students were at upper-intermediate level.

There were two parts in the questionnaire. The first part was made up of 19 items. All these items in the first part of the questionnaire were close-ended with Likert scales (Dörnei, 2003). The participants were asked to indicate to what extent they agreed with each item. They were asked to mark under the option that best stated their opinion. The options were 'Strongly disagree', 'Disagree', 'Not Sure', 'Agree', and 'Strongly Agree' respectively. In the second part, there were two open ended items. The first item investigated what other features students thought *MEC* should have. In the second item, students were asked to state their additional comments if they had any.

The first part of the questionnaire was composed of 4 subscales. The first subscale was the opinions on the convenience of *MEC*. There were 5 items in this subscale which aimed to find out whether students found *MEC* easy and understandable when using it. The second subscale was the opinions on the resources of *MEC*. There were 3 items which aimed to find out what students thought about the resources in *MEC*. The third subscale was the opinions on their learning English using *MEC*. There were 8 items which aimed to find out how students think about *MEC* in their English learning. The last subscale was opinions on the satisfaction with *MEC*. There were 3 items which aimed to find out whether students felt content to use *MEC*. There were 19 items in the questionnaire in total. The scales and items of the questionnaire are presented in Table 7.

Table 7. The Scales and Items of the Student questionnaire

Scale Name	Items
Opinions on the convenience of *MEC*	1.MEC is easy to use. 2.MEC records my learning performance in a way that I can understand easily.

Table 7. continued

	3.MEC makes it easy for me to evaluate my learning performance.
	4.The resources provided by MEC are easy to understand.
	5.MEC makes it easy for me to find the resources I need.
Opinions on the resources of *MEC*	6.MEC provides resources that exactly fit my needs.
	7.MEC provides useful resources.
	8.MEC has provided a wide variety of learning resources.
Opinions on English learning using *MEC*	9.MEC has helped me improve my reading.
	10.MEC has helped me improve my listening.
	11.MEC has helped me improve my vocabulary.
	12.MEC has helped me improve my grammar.
	13.MEC has enhanced my English learning experience.
	14.MEC has given me control over my learning.
	15.I feel confident to learn on MEC in my own time.
	16.I feel confident to learn on MEC at my own pace.
Opinions on students' satisfaction	17.I am satisfied with my learning experience with MEC.
	18.I am satisfied with the resources in MEC.
	19.I have enjoyed using MEC.

After the student questionnaire was developed, it was sent to the training coordinator for *Macmillan English Campus* to be examined to assure the accuracy, clarity, and validity of the questionnaire. All the items were found to be appropriate.

After the examination, the questionnaire was piloted in two classes with a sample population of 32 students in Dual Degree Preparatory Program at İstanbul Technical University as the students studying in this program were the most similar population to the experimental class because they were also using *MEC* as part of their course work. In Dual Degree Preparatory Program students were obliged to buy the program as it was used as part of their course work. Their performance in the program would be part of

their performance grades. During piloting, the researcher encountered no problems related to the items. Therefore, the researcher made no change in the items. Only, during piloting, quite a few students stated that they had started using the program recently, which showed that they did not have much familiarity with the program.

For the questionnaire, internal consistency reliability coefficient, which measures whether items that propose to measure the same characteristics produce consistent scores, was measured after the study. Cronbach Alpha reliability estimation was conducted. The results of the reliability estimates are given in Table 8.

Table 8. Reliability Estimates for the Student questionnaire

Reliability Estimates	Subscale	Number of Items	Cronbach Alpha
	Subscale 1	5	.813
	Subscale 2	3	.822
	Subscale 3	8	.819
	Subscale 4	3	.878
Overall		19	.920

Garson (2007) indicates that "the widely-accepted social science cut-off is that alpha should be .70 or higher for a set of items to be considered a scale, but some use .75 or .80 while others are as lenient as .60". Therefore, by looking at the Cronbach Alpha values of this questionnaire, it can be said that the reliability of the student questionnaire used in this study is above the stated minimum acceptable level for the social sciences.

Data Collection Procedures

At the beginning of 2009/2010 fall term, in ITU School of Foreign Languages, the students were assigned to classes randomly based on the scores that they got from the placement test which was given before the academic year started. All the instructors were also assigned to classes randomly by the school administration. The experimental class was assigned randomly as well. All the procedures which determined the students' and teachers' assignments to the classes and the experimental class assignment were done randomly. However, the control class was not assigned randomly. It was determined based on convenience because not all instructors were willing to give the pre-test and to be compared with the experimental class. Therefore, the approval of the instructor was received in assigning the control class in this study.

The data collection was carried out in three stages. The first stage was the period before the treatment when students were informed about the use of *MEC* and given the background questionnaire and the pre-test. The second stage was the treatment phase, the use of the online LMS called *MEC* and implementation of the progress test. The final stage was after the treatment the phase when students took the post-test and student questionnaire.

<u>Before the Treatment</u>

Before the study began, the students were informed about the use of an online LMS called *Macmillan English Campus* (*MEC*) in their integrated skills and basic courses as part of their coursework in the first week of 2009/2010 academic year fall term. The use of *MEC* was indicated to be compulsory and the completion of the assigned homework would be mandatory and graded as a part of their performance grade. However, students were also informed that they were free to work on other resources which were not assigned. They could search *MEC* database for the resources they wanted to study.

The performance grade, which made up 20% of the total grade of the students, included participation, presentation and portfolio grades. The participation grade of the experimental class would be made up of students' completion of the resources in *MEC* and participation in lessons.

In the second week, the students were given a demonstration on *MEC* by the researcher in class for 2 hours. At the end of the second week, students were given the pre-test, Achievement Exam. The administration of the pre-test was done by the researcher in the experimental class and by the integrated skills course teacher in the control class. In order to be consistent in the test administration, both teachers had a meeting before the pre-test regarding the test administration instructions. The duration of the test was 90 minutes. 3 students from the experimental class and 7 students from the control class did not take the pre-test as they were absent on the test day.

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Before the administration of the pre-test, the students in the control and experimental classes were given the background questionnaire to fill out. It took nearly 10 minutes to fill it out. The questionnaires were collected by the teachers before the pre-test started. The researcher made the missing students in both classes fill out the background questionnaire the following week.

In the third week of the 2009/2010 Academic year fall term, in the experimental class, students were given their usernames and passwords sent by the training coordinator for *MEC* to register their online accounts in *MEC*. The researcher took students to the computer laboratory of the school to do the online registration to *MEC*. After the registration, they were given a hands-on session on the use of the system in the computer lab for 2 hours. The study began with the students' registration to their accounts.

Treatment

The treatment started in the third week of the term after the pre-test and lasted 10 weeks. The students in control and experimental classes received 18 hours of instruction weekly. They had classes two full days and two half days. They had instructions from Monday to Thursday. They had no classes on Fridays. The weekly schedules of the both the experimental and control class is given in Table 9.

Table 9. The Weekly Schedules

A01	Monday	Tuesday	Wednesday	Thursday	Friday
Morning 9:00-12:00	Integrated (Reading)	Integrated (Reading)	Integrated (Listening, Writing)		
			Lunch Break		
Afternoon 13:00-15:50		Basic English	Integrated (Writing)	Basic English	

A04	Monday	Tuesday	Wednesday	Thursday	Friday
Morning 9:00-12:00		Basic English		Integrated (Listening, Writing)	
			Lunch Break		
Afternoon 13:00-15:50	Integrated (Reading)	Integrated (Reading)	Basic English	Integrated (Writing)	

On the fifth week of the treatment, the students in both classes were given a progress test, Cumulative I, so as to see the progress in their achievement. In each class, there was one student having medical excuses on the progress test day and they did not take the progress test.

The students in both classes had to follow the books, materials and assignments determined by the Curriculum Office of the School of Foreign Languages. The students in the experimental class used an online LMS called *Macmillan English Campus* (*MEC*), which is an Internet-based, interactive learning environment that helps students to practise English. It has an online database of interactive learning resources, and reference materials. *MEC* also provides games and articles of current news.

MEC is designed for 'blended learning', offering supplementary online practice at home or in class. While students continue to receive face-to-face instruction and contact with their teachers, they have a chance to study online within a controlled

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learning environment via this online learning management system providing online support materials.

On a *MEC* page, there are global navigation buttons, tabs, drop-down menus and links. Global navigation buttons, placed on the top right-hand side of every page take students to Help, Word List, Dictionary, Grammar Reference, Messages and Logout. On tabs, there are five main areas on a student's page: Study Area, Search, Courses, Tests & Exams, and Games. On a teacher's page, Study Area changes into Work Area, where teachers have access to the Methodology Database differing from the students. Once students log on to *MEC*, the Study Area opens as the main page. For teachers, the Work Area is the main page. From this main page, students and teachers can get to all other areas of the *MEC*. All the tabs have drop-down menus, which correspond to links on *MEC* pages. Figure 1 shows a screenshot from a main page of a student account.
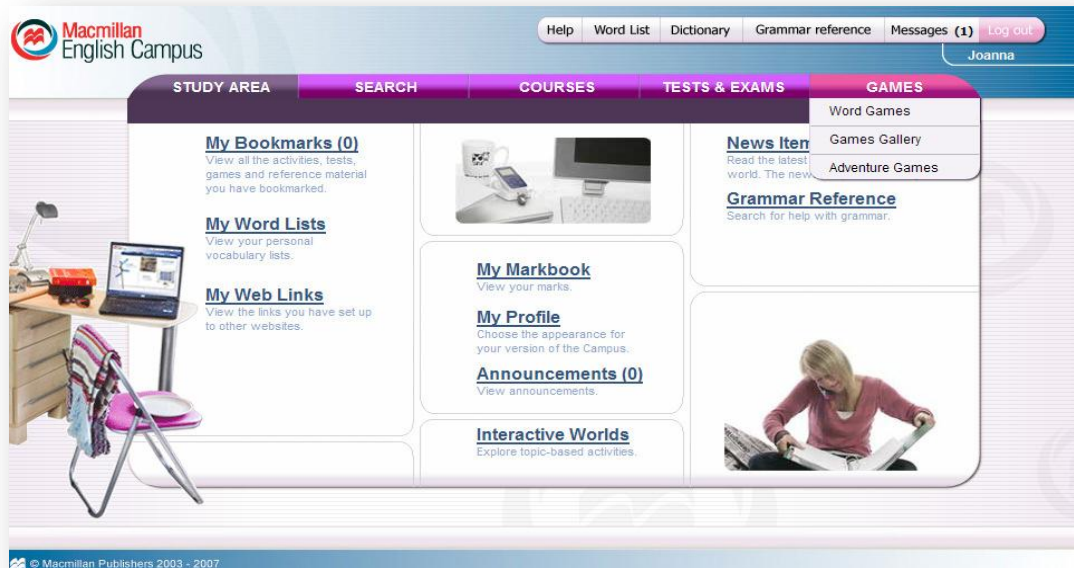
Fig. 1 Screenshot from the main page of a student account

MEC has a bank of more than 4000 individual resources altogether. The resources in *MEC* are developed by Macmillan's ELT authors. The materials have been organized into courses at 6 levels in British or American English for both teenagers and adult learners. There are General English courses, Business English courses, Academic English courses and courses mapped to Common European Framework (CEF) levels as well as courses relating to specific course books such as *Inside Out* and *In Company*. Besides, institutions can build their own courses in *MEC*.

In this study, the experimental class had access to General English Level 5, CEFR B2 and Academic English with IELTS courses. An extra course called 'Extra Reading Listening and Writing' was built by the researcher after the study began as the

authorization of course building was approved by the training coordinator for *MEC*. The extra course was made up reading, listening and writing resources. In building the extra course, students' needs and the scope of the integrated skills course were taken into consideration.

Each course in *MEC* is divided into syllabus items, which are the same as lessons in course books. A syllabus item is made up of syllabus components, which can be thought as the individual types of language focus shown in the syllabus or content of a course book. Typical syllabus components might be 'grammar', 'vocabulary', or 'listening'. Sometimes syllabus items are grouped together into units. A unit corresponds to a unit or module in the course books.

The content offered by *MEC* includes language exercises which are activities to practise grammar and language functions, listening activities which are activities to practise listening skills, pronunciation activities which are activities to practise all aspects of pronunciation and phonology, including vowel and consonant sounds, stress, intonation and the phonetic alphabet, vocabulary activities which are activities to practise all aspects of lexis, including phrasal verbs, synonyms and antonyms, prefixes and suffixes, collocations and lexical sets, progress tests which are tests comprising language and listening activities allowing students to test themselves against the clock, exam preparation exercises which are exercises for the full Cambridge ESOL main suite and IELTS exams, as well as the TOEFL exams, business exercises which are a large bank of business-orientated activities developing students' skills in a variety of essential business situations, games which are divided into various game-play types including

vocabulary or grammar-based games, adventure games and word games in the form of crosswords or word searches, news items which are an authentic topical news story updated weekly in three (easy, average and difficult) bands of language ability, sample essays which provide examples of answers to comprehension questions of varying length and an examiner's assessment as a guide, web projects in which students are directed towards particular websites and then given activities based on the topics and language they encounter there by enabling them to tackle authentic English, and methodology database which provides teachers and administrators with the practical and the theoretical aspects of teaching.

There are also reference tools in *MEC*. These are grammar reference units which provide explanations and practice of different language points, *Macmillan English Dictionary Online*, which provides over 100,000 references and 30,000 idioms and phrases with British and American pronunciation as well as self-study and learner-training pages, word lists which provide an interactive forum in which students can set up and categorize word lists of new vocabulary whether originating from the *Macmillan English Dictionary Online* or from independent learning, web links which allow to set up and organize links to web resources available outside the *MEC* learning environment, and bookmarks which enable every activity in the *MEC* to be bookmarked and categorized for later viewing and a student's comments to be logged against each bookmark.

All the content and reference tools on *MEC* are controlled by a content management system, which allows getting feedback on user performance and charting

resources to teaching requirements. In this system, The Markbook, which gives administrators and teachers an essential overview of student or class progress and the means to manage and export the marks for all the work completed by their class, is one of the primary features. Whenever students submit a resource that they have completed, their marks are sent instantly to the Markbook. The other feature is resource management which enables creating online course pathways to match the currently used materials that are used in an institution. Moreover, administrators can publish announcements to all teachers and students loaded on *MEC*. Finally, teachers can publish Bookmarks, Word Lists, and Web Links and send instant messages directly to all students or individual students. This enables the teacher to introduce specific remedial work for individual students within a class.

The students in the experimental class started using *MEC* on the third week of the 2009/2010 Academic year fall term. There were four courses that students had access to. The researcher as the integrated skills course teacher was responsible for two online courses, 'English for Academic Purposes with IELTS' and 'Extra Reading Listening, and Writing' and the basic course teacher was responsible for the other two courses, 'General English Level 5' and 'CEFR B2', in *MEC*.

The students were assigned resources from the courses in *MEC* weekly by the researcher as the integrated skills course teacher. The assignments were from 'English for Academic Purposes with IELTS' and 'Extra Reading Listening and Writing' courses. However, the researcher assigned 5 resources, 4 listening activities and 1 language exercise, from 'CEFR B2' course. The aim of the assignments was to practise and revise

the skills and points covered in the lessons. The resources covered in *MEC* were considered as supplementary to the course materials used in class and planned matching with the pacing of the A Level program in a recursive manner. All of the weekly plans prepared by the researcher for *MEC* are given in Appendix C.

The basic course teacher was also supposed to assign resources occasionally from 'General English Level 5' and 'CEFR B2'. However, she refrained from sharing information on the scope and the purpose of the assigned resources. She revealed only the number of the resources she assigned.

The students were taken to the computer laboratory for one hour biweekly after the study began. In the lab sessions, students were supposed to work on the assigned resources and ask for help about the problematic issues or problems they faced in using *MEC*. The lab sessions were useful in helping students solve problems.

Students were free to do any other study apart from the assigned resources on their own whenever they wanted in *MEC*. They could search the database of *MEC* for any materials that they needed to study or wanted to study. They could read news items which are published weekly, play games or work on different kinds of exams practice resources available in *MEC*. In short, they could use the *MEC* for self-study as well.

The resources assigned by the teachers to students were language exercises, vocabulary activities, listening activities, pronunciation activities, exam preparation exercises, language tests and grammar reference units. The interaction types in these resources were gap-fill type-in, gap-fill drag and drop, rearranging words, phrases or sentences, multiple choice where students select one choice from a list of two or more

options, true/false choice, check list where students can select more than one choice from a longer list of options, highlighting words in a sentence or text, deleting words from a sentence or text, and matching words, phrases or sentences.

During the study, the researcher assigned 111 resources and the basic course teacher assigned 89. Students were assigned a total of 200 resources: 52 language exercises, 44 listening activities, 23 vocabulary activities, 32 grammar reference units, 43 exam practice resources, 2 pronunciation activities and 4 language tests from the four courses they had access to. The completion of these resources was compulsory for all the students. Table 10, 11, 12 and 13 show the number of total, assigned and optional resources in each course.

Table 10. Number of Resources in EAP with IELTS Course

	Language Exercises	Listening Activities	Vocabulary Activities	Sample Essays	Web Projects	Grammar Reference Units	Exam Practise	Total
EAP with IELTS	26	25	8	15	11	15	35	135
Assigned	15	16	3	0	1	11	24	70
Optional	11	9	5	15	10	4	11	65

Table 11. Number of Resources in Extra Reading Listening and Writing Course

	Language Exercises	Listening Activities	Vocabulary Activities	Sample Essays	Total
Extra Course	13	9	10	13	45
Assigned	12	7	10	0	29
Optional	1	2	0	13	16

Table 12. Number of Resources in General English Course

	Language Exercises	Listening Activities	Vocabulary Activities	Pronunciation Activities	Grammar Reference Units	Total
General English	49	30	30	17	56	190
Assigned	19	5	5	2	8	31
Optional	30	25	25	15	48	159

Table 13. Number of Resources in CEFR B2 Course

	Language Exercises	Listening Activities	Vocabulary Activities	Grammar Reference Units	Exam Practise	Language Test	Total
CEFR B2	52	51	25	61	58	9	256
Assigned	6	16	5	13	19	4	63
Optional	46	35	20	48	39	5	193

In order to find out the completion ratio of the assigned resources, the student log file, which showed the time students logged in and out *MEC*, how much time they spent in *MEC* for each log, the number of resources they worked on in each log and the code of the resource studied by the them in each log, was analyzed. The resource codes studied by the students for less than 5 minutes were taken out of the analysis. The analysis of the completed resource codes in *MEC* revealed that 80.34% of the assigned resources were completed by the students.

As for the students in the control class, they followed the weekly pacing schedule determined by the Curriculum Office. In the weekly pacing schedules, the materials which needed to be covered and the assignments to be completed were announced. The basic course and integrated course teachers were supposed to teach the required materials and assign announced homework. The students in the control class did not use

any kind of online course tools or activities in their lessons. They only followed the materials and assignments in the weekly pacing schedules. A sample weekly pacing schedule prepared by the Curriculum Office of the School of Foreign Languages is given in Appendix D.

<center>After the Treatment</center>

At the end of the 10th week of the treatment, the control and the experimental classes were administered the post-test, Cumulative Exam II. All the students both in the experimental and control classes were present on the post-test day and took the post-test. The post-test was comprised of listening, grammar, vocabulary, reading and writing sections. The duration of the test was 120 minutes including the writing section. The scores of the writing section were excluded from the total score of the students as this study aimed to find out any difference in overall achievement and listening, grammar, vocabulary and reading achievement.

In addition to the post-test, students in the experimental class were given a student questionnaire on the use of *MEC* the following week of the post-test.

Data Analysis

The data collected through the pre-test, progress test, post-test and student questionnaire was analyzed via SPSS (Statistical Package for the Social Sciences) program. The written answers and comments of the students were analyzed through content analysis.

Test Scores

In order to find out any preexisting difference in the achievement between experimental and control class, their pre-test scores were compared with independent samples t-test. Before applying independent samples t-test, test scores of the students who did not take one of the tests were excluded from the analysis as they would affect the overall class score results of the analysis. Therefore, the scores of 4 students from the experimental class and 8 students from the control class were left out of the analysis. Furthermore; the data gathered by means of the pre-test, progress test and post-test was checked for homogeneity by using Levene's equality of variances test. Alpha level of .05 was used for all statistical tests.

After ensuring the homogeneity of the data, the pre-test data was submitted to independent samples t-test to find out the pre-existing differences between the control and experimental classes in reading, listening, vocabulary and grammar achievement and overall achievement. The results of the pre-test revealed that experimental and control classes were different from each other in terms of grammar achievement.

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However, there was no statistically significant difference in their listening, reading vocabulary and overall achievement.

For the grammar achievement scores which were statistically different between the classes, Analysis of Covariance (ANCOVA) was not conducted as the homogeneity of regression slopes assumption was not met. Therefore, repeated measures Analysis of Variance (ANOVA) was conducted for all the scores. A 2X3 (2 Group: Experimental vs. Control X3 Test: Pre-test, Progress test and Post-test) mixed ANOVA with repeated measures was conducted to find out whether an online LMS called *MEC* has an effect on overall, listening, reading, grammar and vocabulary achievement of students. For the grammar scores, the gain scores analysis was conducted between the pre-test and progress test scores and between pre-test and post test scores.

Questionnaire

In order to find out the students' opinions on the use of *MEC*, descriptive statistic results, mean values and standard deviations, were used.

The written responses of the students in the second part of the questionnaire were analyzed using content analysis by the researcher.

Summary

The research questions of the present study, the instruments used to measure these

research questions and the methods used to analyze these instruments are summarized in

Table 14.

Table 14. Summary of the Research Questions, Instruments and Data Analysis Methods

Research Questions	Instruments	Data Analyses

1. Does the use of an online management system called *Macmillan English Campus* have an effect on English learners' achievement in a university preparatory program?
  a. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their overall the achievement?
  b. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their listening achievement?
  c. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their reading achievement?
	Pre-test (Achievement Exam), Progress test (Cumulative Exam I) and Post-test (Cumulative Exam II)	Independent samples *t*-test
		
		2X3 mixed ANOVA with Repeated Measures
		
		Gain score analysis

Table 14. continued

d. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their grammar achievement?		
e. Is there a statistically significant difference between students exposed to a combination of conventional in-class instruction and online learning management system and those exposed to traditional in-class instruction only in terms of their vocabulary achievement?		
2. What are Turkish university EFL prep-students' opinions on the use of the online learning management system called *Macmillan English Campus* in their English learning in a Technical State University?	Student Questionnaire	Descriptive Statistics Content Analysis

CHAPTER 4

RESULTS

In this chapter, the results of the analyses conducted based on the methods and

procedures specified in the methodology chapter will be presented. There are mainly two

sections. In the first section, the results on the achievement of the students will be

presented in terms of their overall achievement, listening achievement, reading

achievement, grammar achievement, and vocabulary achievement. In the second part,

the results on the student questionnaire will be presented.

Results on Student Achievement

The first research question aimed to investigate whether the use of an online LMS called

MEC have an effect on Turkish university EFL prep-students' achievement. The student

achievement was investigated in terms of five aspects: overall achievement, listening

achievement, reading achievement, grammar achievement, and vocabulary achievement.

The confidence intervals for the given tests are presented in Appendix E.

In order to investigate the achievement of students, the scores of pre-test,

progress test and post-test were analyzed in a 2 (Groups: Experimental vs. Control) X 3

(Tests: Pre-test, Progress test and Post-test) mixed analysis of variance (ANOVA) with

repeated measures.

Before conducting 2X3 mixed ANOVA, the pre-test scores of the students were

analyzed with independent-samples *t*-test in order to find out whether there was any pre-

existing achievement difference between the experimental and the control classes. The

results of the *t*-test revealed no statistical difference in listening ($t(58)=.446$, $p=.657$),

reading ($t(58)=.537$, $p=.594$), vocabulary ($t(58)=829$, $p=.410$) and overall ($t(58)=1.984$,

$p=.052$) scores between the experimental class and the control class. The grammar

scores ($t(58)=3.001$, $p=.004$) are revealed to be significantly different experimental class

($\overline{X}= 63.44$, SD= 11.32) outperforming the control class ($\overline{X}= 53.29$, SD= 14.84).

Results on Overall Achievement

The means and standard deviations of pre-test, progress test and post-test for each class

are given in Table 15.

Table 15. The Mean Scores and Standard Deviations for Overall Achievement

| | Experimental Class | | Control Class | |
	Mean	Std. Deviation	Mean	Std. Deviation
Pre-test	68.91	10.71	63.43	10.63
Progress Test	73.00	9.18	67.07	10.63
Post-test	77.25	6.18	65.43	8.14

The means of the pre-test, progress test, and post-test of the experimental class are

higher than the means of the pre-test, progress test, and post-test of the control class.

Besides, the means of the experimental group increases from the pre-test to post-test gradually. However, the means of the control group increases from pre-test to progress-test, but decrease from progress test to post-test. In order to find out whether these mean differences are significantly different, the overall achievement scores were submitted to 2X3 mixed ANOVA.

Mauchly's test indicated that the assumption of sphericity was retained (chi-square = .844, p=.656). The ANOVA results indicated that there was a significant main effect for group $F(1, 58) = 15.863$, p=.000 , and test $F(2, 116) = 9.245$, p=.000 , and a significant interaction between group and test $F(2, 116) = 4.002$, p= .021.
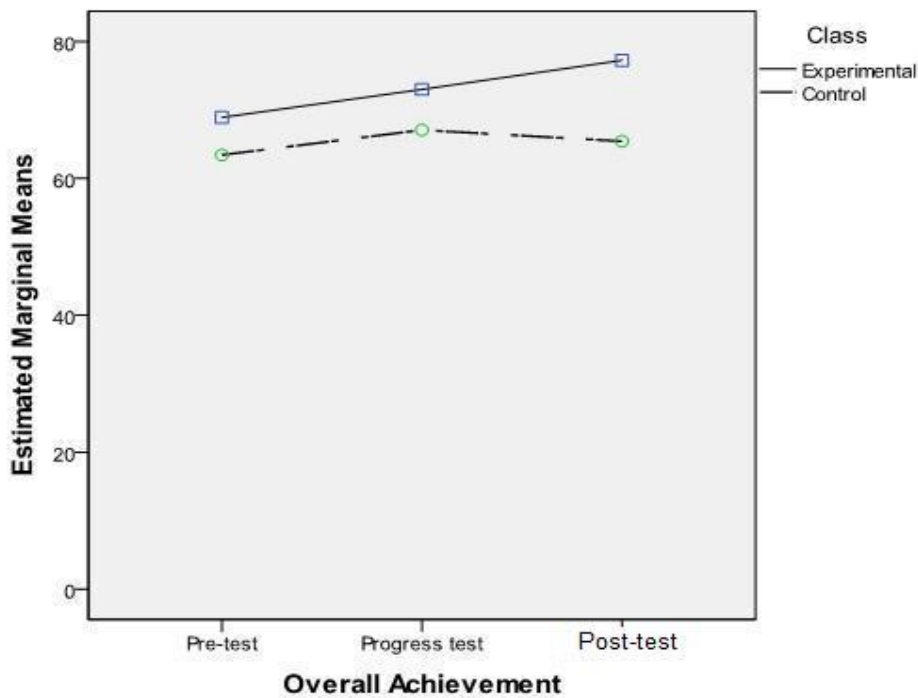

Fig. 2 Overall achievement of experimental and control classes

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Post hoc pairwise comparisons using the Bonferroni test reveal that there was a significant difference between the pre-test and progress and post tests. However, there was no statistical difference between the progress test and post-test. The overall achievement scores of experimental class steadily increased from pre-test to post-test. In the control class, the overall achievement scores increased from pre-test to progress test while they decreased from progress test to post-test.

The progress test and post-test scores of the experimental and the control class were compared with an independent samples t-test in order to find out whether there are statistical differences between them in these exams. The t-test results of the progress test ($t(58)=2.318$, $p=.024$) and post-test ($t(58)=6.381$, $p=.000$) revealed that the scores of the experimental class are significantly higher than the scores of the control class.

<u>Results on Listening Achievement</u>

The means and standard deviations of pre-test, progress test and post-test for each class are given in Table 16.

Table 16. The Mean Scores and Standard Deviations for Listening Achievement

	Experimental Class		Control Class	
	Mean	Std. Deviation	Mean	Std. Deviation
Pre-test	79.13	17.31	78.04	18.59
Progress test	60.66	16.19	43.74	16.92
Post-test	67.41	16.42	43.74	16.00

The means of the pre-test, progress test, and post-test of the experimental class are higher than the means of the pre-test, progress test, and post-test of the control class. The means of the both experimental and control groups decreases from the pre-test to progress test. However, the mean of the experimental group increases from progress-test to post-test while the means of the control group does not change from pre-test to progress test. In order to find out whether these mean differences are significantly different, the listening scores were submitted to 2X3 mixed ANOVA.

Mauchly's test indicated that the assumption of sphericity had been retained (chi-square = 1.328, p=.515). The results show that there was a significant main effect for group $F(1, 57) = 20.732$, p=.000 , and test $F(2, 114) = 53.892$, p=.000 , and a significant interaction between group and test $F(2, 114)$ =8.778, p=.000.
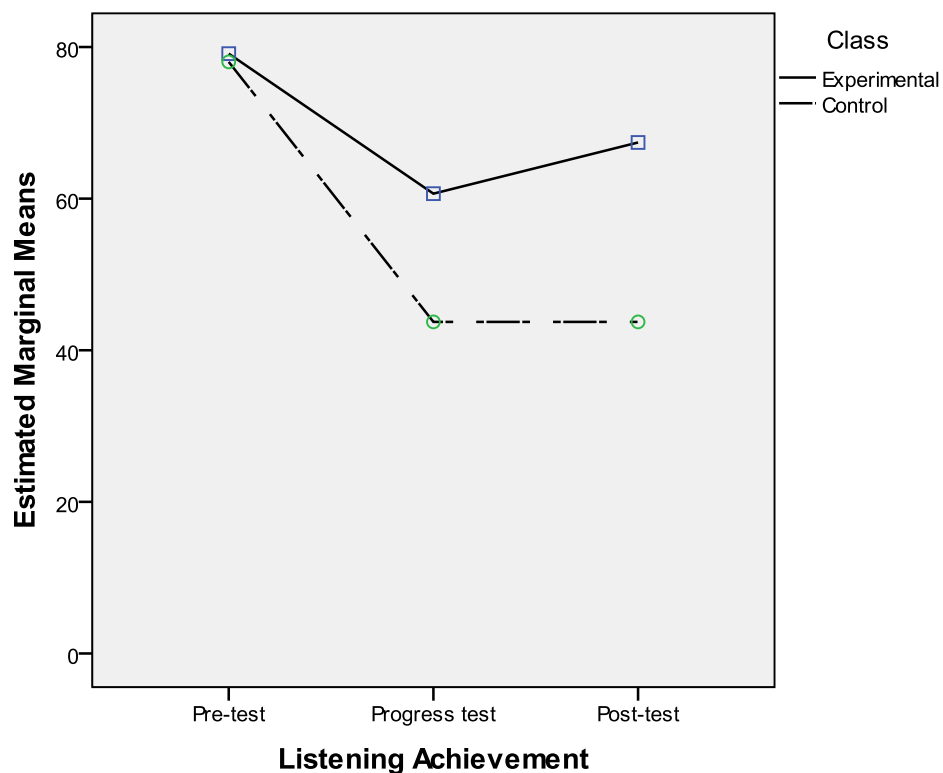
Fig. 3 Listening achievement of experimental and control classes

Post hoc pairwise comparisons using the Bonferroni test reveal that there was a significant difference between the pre-test and progress and post tests. However, there was no statistical difference between progress test and post-test. Students' listening achievement scores decreased significantly from pre-test to post test in both classes. The decrease in the control class was sharper than the decrease in the experimental class. In the control class, the listening achievement scores did not change from progress to post test while the listening achievement scores of the experimental group increased from progress to post-test.

The progress test and post-test scores of the experimental and the control class were compared with an independent samples *t*-test in order to find out whether there are statistical differences between them in these exams. The *t*-test results of the progress test ($t(57)=3918$, $p=.000$) and post-test ($t(58)=5.625$, $p=.000$) revealed that the scores of the experimental class are significantly higher than the scores of the control class in these exams.

Results on Reading Achievement

The means and standard deviations of pre-test, progress test and post-test each test for each class are given in Table 17.

Table 17. The Mean Scores and Standard Deviations for Reading Achievement

	Experimental Class		Control Class	
	Mean	Std. Deviation	Mean	Std. Deviation
Pre-test	76.88	15.75	74.64	16.44
Progress test	78.25	10.51	72.14	13.49
Post-test	94.44	6.46	71.93	11.44

The means of the pre-test, progress test, and post-test of the experimental class are higher than the means of the pre-test, progress test, and post-test of the control class. The means of the experimental group increases from the pre-test to post-test gradually while the means of the experimental group decrease from pre-test to prost-test gradually. In

order to find out whether these mean differences are significantly different, the reading scores were submitted to 2X3 mixed ANOVA.

Mauchly's test indicated that the assumption of sphericity had been violated (chi-square = 7.479, p=.024), therefore degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity (epsilon = 0.890). The results show that there was a significant main effect for group $F(1, 58) = 21.854$, p=.000, and test $F(1.781, 103.297) = 8.840$, p=.000, and a significant interaction between group and test $F(1.781, 103.297) = 12.886$, p=.000.
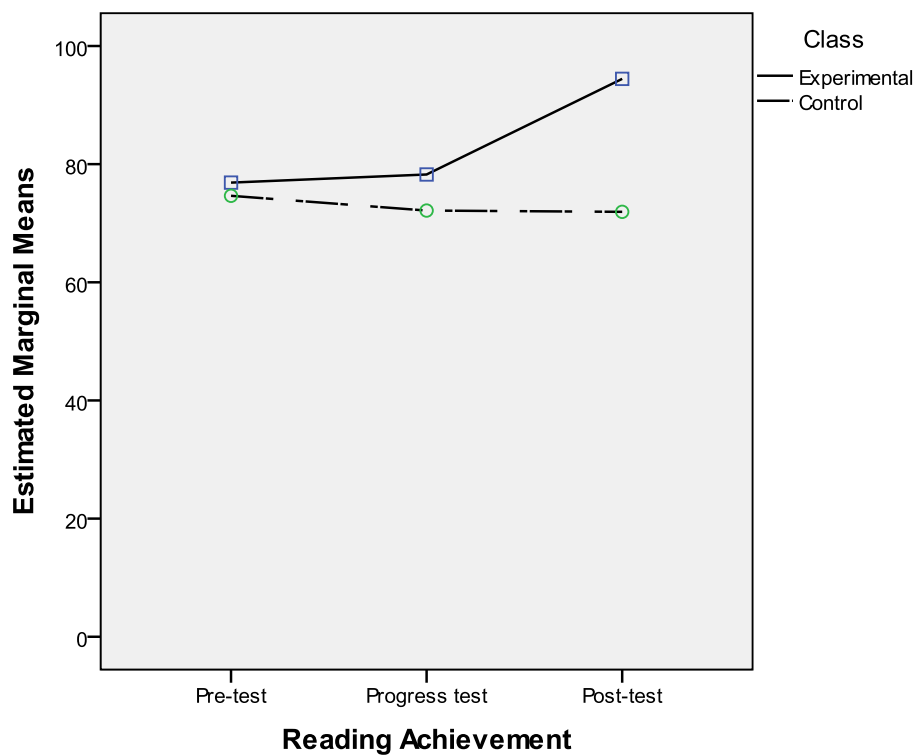

Fig. 4 Reading achievement of experimental and control classes

Post hoc pairwise comparisons using the Bonferroni test reveal that there was no statistical difference between the pre-test and progress test while there was a statistical difference between the pre-test and post-test. Besides, there was also a significant difference between the progress test and post-test. Students' reading achievement scores in the control class decreased slightly from pre-test to progress test while the achievement scores of the experimental class increased slightly. The decrease in the control class went on from progress test to post-test. However, in the experimental class, the reading achievement scores increased sharply from progress test to pos-test.

The progress test and post-test scores of the experimental and the control class were compared with an independent samples *t*-test in order to find out whether there are statistical differences between them in these exams. The *t*-test results of the progress test ($t(58)=1.964$, $p=.054$) revealed that there is no statistically significant difference in the reading scores of the experimental class and the control class in the progress test. However, the *t*-test results of the post-test ($t(41.358)=9.204$, $p=.000$) revealed that the scores of the experimental class are significantly higher than the scores of the control class in the post-test.

Results on Grammar Achievement

The means and standard deviations of pre-test, progress test and post-test for each class are given in Table 18.

Table 18. The Mean Scores and Standard Deviations for Grammar Achievement

	Experimental Class		Control Class	
	Mean	Std. Deviation	Mean	Std. Deviation
Pre-test	63.44	11.32	53.29	14.84
Progress test	76.91	10.24	76.14	9.23
Post-test	75.13	9.78	72.14	12.16

The means of the pre-test, progress test, and post-test of the experimental class are higher than the means of the pre-test, progress test, and post-test of the control class. The means of the experimental and the control group increase from the pre-test to progress test, but decrease from progress test to post-test. The decrease in the mean of the experimental is slighter than the decrease in the mean of the control class. In order to find out whether these mean differences are significantly different, the grammar scores were submitted to 2X3 mixed ANOVA.

Mauchly's test indicated that the assumption of sphericity was retained (chi-square = 2.101, p=.350). The results show that there was a significant main effect for group $F(1, 58)$ =5.350, p=.024, and test $F(2, 116) = 55.012$, p=.000, and a significant interaction between group and test $F(2, 116) = 3.477$, p=.034.
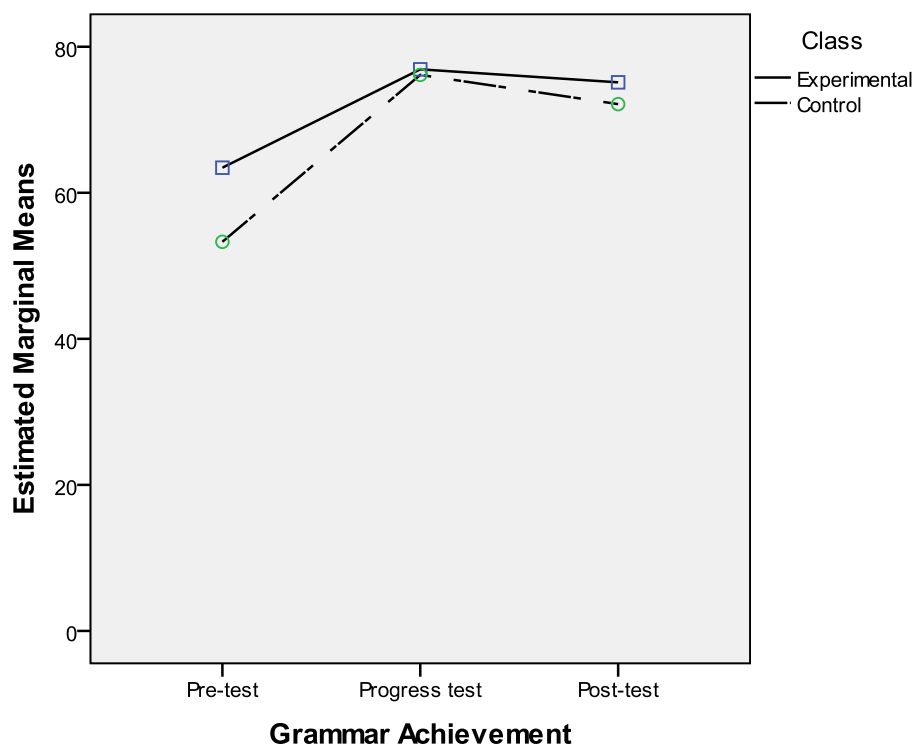
Fig. 5 Grammar achievement of experimental and control classes

Post hoc pairwise comparisons using the Bonferroni test reveal that there was a significant difference between the pre-test and progress and post-tests. However, there was no statistical difference between the progress test and post-test. Although the experimental class outperformed the control class significantly in the pre-test, the grammar achievement score difference between these classes in the progress test was slight and achievement scores of both classes increased significantly. From progress test to post-test, the grammar achievement scores of both classes decreased. The decrease in the control class was more than the decrease in the experimental class.

The progress test and post-test scores of the experimental and the control class were compared with an independent samples *t*-test in order to find out whether there are statistical differences between them in these exams. The *t*-test results for the progress test ($t(58)=.302$, *p*=.764) and post-test ($t(58)=1.052$, *p*=.297) revealed that there is no statistically significant difference in the grammar scores of the experimental class and the control class in these test.

Considering the fact that the experimental group performed significantly better than the control group on the pre-test, means of gain scores between pre-test and progress test and between post-test and pre-test were compared with an independent samples *t*-test.

The results show that there was a significant difference in the means of the gain scores of the experimental class ($\overline{X}= 13.47$, SD= 12.29) and the control class ($\overline{X}= 22.85$, SD= 16.83) between pre-test and progress test ($t(58)=-2.488$, *p*= .016). However, there was not a significant difference in the gain scores of the experimental class ($\overline{X}= 11.69$, SD= 11.61) and the control class ($\overline{X}= 18.86$, SD= 18.86) between pre-test and post-test $t(43.682)=-1.743$, *p* = .088.

<u>Results on Vocabulary Achievement</u>

Pre-test, progress test and post-test scores were taken as a measure of vocabulary achievement. The means and standard deviations of each test for each class are given in Table 19.

Table 19. The Mean Scores and Standard Deviations for Vocabulary Achievement

	Experimental Class		Control Class	
	Mean	Std. Deviation	Mean	Std. Deviation
Pre-test	54.91	21.20	50.50	19.73
Progress test	71.28	21.82	68.46	20.67
Post-test	61.88	20.07	55.36	23.49

The means of the pre-test, progress test, and post-test of the experimental class are higher than the means those of the control class. The means of both the experimental and the control groups increase from the pre-test to progress test but decreases from progress test to post-test. In order to find out whether these mean differences are significantly different, the vocabulary scores were submitted to 2X3 mixed ANOVA.

Mauchly's test indicated that the assumption of sphericity was retained (chi-square = .905, p=.636). The results show that there was a significant main effect for test $F(2, 116) = 12.070$, p=.000, but no main effect for group $F(1, 58) =1.583$, p=.213, and no significant interaction between group and test $F(2, 116) = .137$, p=.872.
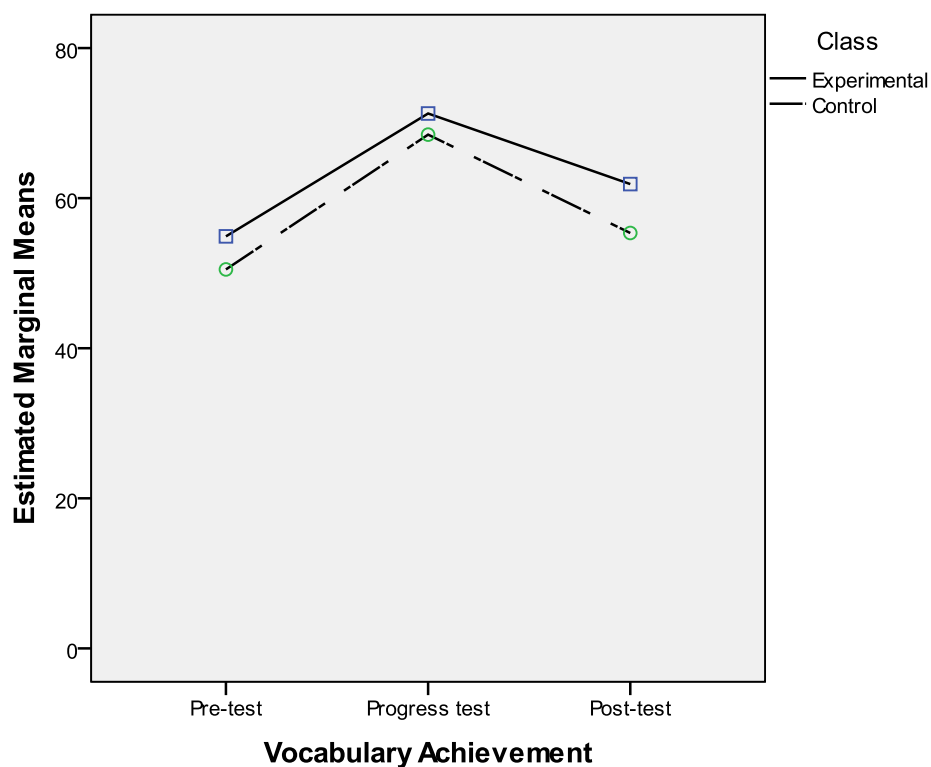
Fig. 6 Vocabulary achievement of experimental and control classes

Post hoc pairwise comparisons using the Bonferroni test reveal that there was a statistical difference between the pre-test and progress test while there was no statistical difference between the pre-test and post-test. Besides, there was a statistical difference between the progress test and post-test. The achievement scores of both classes follow the same pattern from pre-test to post-test. The vocabulary achievement scores of both classes increased significantly from pre-test to progress test while they decreased significantly from progress test to post-test.

Results on the Student Questionnaire

The second research question aimed to investigate what were Turkish university EFL prep-students' opinions of the use of the online LMS called *MEC* in their English learning. In order to investigate the opinions of the students on the use *MEC* in their English learning, the student questionnaire was designed.

Results on the Questionnaire Statistics

In order to investigate the opinion of students, student questionnaire was conducted. The student opinions were investigated in terms of four aspects: opinions on the convenience, resources, English learning with *MEC* and satisfaction.

Opinions of Students on Convenience

In the first subscale of the questionnaire, students' opinions on the convenience of *MEC* were investigated by the use of 5 items. The results are presented in Table 20.

Table 20. Descriptive Statistics for Students' Opinions on the Convenience of *MEC*

	Disagree		Not Sure		Agree			
	n	%	n	%	n	%	Mean	SD
1.MEC is easy to use.	12	33.40	8	22.20	16	44.40	2.11	.89
2.MEC records my learning performance in a way that I can understand easily.	7	19.40	10	27.80	19	52.80	2.33	.79
3.MEC makes it easy for me to evaluate my learning performance.	9	25.00	6	16.70	21	58.40	2.33	.86
4.The resources provided by MEC are easy to understand.	5	14.30	14	40.00	16	45.80	2.31	.72
5.MEC makes it easy for me to find the resources I need.	10	27.70	14	38.90	12	33.40	2.06	.79
Overall	8.6	23.96	10.4	29.12	16.8	46.96	2.23	.81

As it is seen is the Table 20, nearly half of the students stated positive opinions on the ease of the resources in *MEC* and use of *MEC*. Slightly more than half of the students stated their positive opinions on the understandability of the record keeping of learning in *MEC* and more than half of them stated positive opinions on the ease of evaluating their performance using *MEC*. However, for the last item investigation the ease of finding resources using *MEC*, the percentage of the indecisive students is higher than the students stating positive opinions and negative opinions.

In the second subscale of the questionnaire, students' opinions on the resources in *MEC* were investigated by the use of 3 items. The results are given in Table 21.

Table 21. Descriptive Statistics for Students' Opinions on the Resources in *MEC*

	Disagree		Not Sure		Agree			
	n	%	n	%	n	%	Mean	SD
6.MEC provides resources that exactly fit my needs.	8	22.20	16	44.40	12	33.40	2.11	.75
7.MEC provides useful resources.	6	16.70	11	30.60	19	52.80	2.36	.76
8.MEC has provided a wide variety of learning resources.	7	19.50	6	16.70	23	63.90	2.44	.81
Overall	7	19.47	11	30.57	18	50.03	2.30	.77

For the sixth item investigating whether *MEC* provides resources fitting exactly students' needs, less than half of the students were indecisive. However, slightly more than half of the students stated positive opinions to the item investigating whether *MEC* provides useful resources. For the last item investigating the variety of the resources in *MEC* in this subscale, nearly two thirds of the students stated positive opinions.

<u>Opinions of Students on English Learning with *MEC*</u>

In the third subscale of the questionnaire, students' opinions on their learning English

with *MEC* were investigated by the use of 8 items. The results are given in Table 22.

Table 22. Descriptive Statistics for Students' Opinions Learning English with *MEC*

	Disagree		Not Sure		Agree			
	n	%	n	%	n	%	Mean	SD
9.MEC has helped me improve my reading.	17	47.30	8	22.20	11	30.60	1.83	.88
10.MEC has helped me improve my listening.	4	11.10	3	8.30	29	80.50	2.69	.67
11.MEC has helped me improve my vocabulary.	8	22.30	7	19.40	21	58.40	2.36	.83
12.MEC has helped me improve my grammar.	6	16.70	7	19.40	23	63.90	2.47	.77
13.MEC has enhanced my English learning experience.	8	22.30	14	38.90	14	38.90	2.17	.77
14.MEC has given me control over my learning.	8	22.20	19	52.80	9	25.00	2.03	.70
15.I feel confident to learn on MEC in my own time.	9	25.00	12	33.30	15	41.70	2.17	.81
16.I feel confident to learn on MEC at my own pace.	8	22.20	10	27.80	18	50.00	2.28	.81
Overall	8.5	23.64	10	27.76	17.5	48.63	2.25	.68

As it is seen in Table 22, three quarters of the student stated positive opinions on the effectiveness of *MEC* in their listening improvement. Slightly less than half of the students stated negative opinions on the effectiveness of *MEC* in their reading improvement. More than half of the students stated their positive opinions on the effectiveness of *MEC* in their vocabulary improvement *MEC*. Nearly two thirds of the students stated positive opinions on the effectiveness of *MEC* in their grammar improvement. For the thirteenth item investigating whether *MEC* had enhanced students' learning, the percentage of the students who stated positive opinions equals to the percentage of the students who were indecisive. For the fourteenth item investigating whether *MEC* had given control students over their learning, slightly more than half of the students were indecisive. For the fifteenth item investigating students' feeling regarding their learning in their own time on *MEC*, less than half of the students stated positive opinions. For the last item investigating students' feeling regarding their learning at their own pace on *MEC* in half of the students stated positive opinions.

Opinions of Students on Satisfaction

In the fourth subscale of the questionnaire, students' opinions on their satisfaction with *MEC* were investigated by the use of 3 items. The results are presented in Table 23.

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Table 23. Descriptive Statistics for Students' Satisfaction with *MEC*

	Disagree		Not Sure		Agree			
	n	%	n	%	n	%	Mean	SD
17.I am satisfied with my learning experience with MEC.	17	47.20	10	27.80	9	25.00	1.78	.83
18.I am satisfied with the resources in MEC.	10	27.80	13	36.10	13	36.10	2.08	.81
19.I have enjoyed using MEC.	25	69.40	7	19.40	4	11.10	1.42	.69
Overall	17.33	48.13	10	27.77	8.67	24.07	1.76	.78

Nearly half of the students stated negative opinions on their satisfaction with their learning with *MEC*. In terms of students' satisfaction with the resources in *MEC*, the percentage of the students stating positive opinions equals to the percentage of the indecisive students. For the last item investigating student enjoyment using *MEC* in this subscale, more than two thirds of the students stated negative opinions.

Results on the Content Analysis

In the second part of the questionnaire, there were two open-ended items. The first item investigated what students thought what other features *MEC* should have and the second item was on additional comments of students.

For the first question asking students' suggestion about the additional features that *MEC* should have, six students expressed their suggestions. The features that

students think that *MEC* should have fall into two categories: features enabling student interaction within *MEC* and features fostering extensive study.

Four students expressed that they should be able to communicate among themselves via messaging among students or forum pages. One student stated that common areas in which students can study together can be provided via student-student messaging. In *MEC*, only teacher-student and student-teacher messaging are enabled. Another student stated that communication among students should be found so that students can help each other sharing their knowledge. Another student stated that if a forum page is established in *MEC*, everyone (students) can express themselves easily. The features for extensive study were suggested by only two students. One student stated that there should be external links to daily videos and an American news channel page, and the other student stated that *MEC* may evaluate their intonation and pronunciation.

For the second item asking students' additional comments, the content analysis reveal that the comment of the students focuses mainly on the problems they experienced when they were studying in *MEC*. Students' comments can be categorized into 6: the problems regarding reading resources, resource page design, the server of *MEC*, feedback, Grammar Reference section, and the reasons for discontentment.

Thirteen students pointed out problems about the reading resources. The presentation of the reading texts in a box and the font size and spacing of the texts are the problems indicated by the students as they stated these problems made reading hard and caused eye tiredness. Students wanted texts to be presented in a big box or large

space with bigger fonts and enough spacing. Besides, they complain about the fact that they could not copy words from texts when they wanted to look them up using online dictionary. Three students stated that they thought that the reading texts were long and they got bored reading them. One students said that s/he found reading texts difficult.

Seven students indicated problems regarding resource page design. They stated that the exercise pages were small and must be enlarged.

Another problem pointed out by students is about the server of *MEC*. Seven students stated that the site must be fast. They stated that loading of a new page took time.

Three students stated problems regarding feedback. When a student made a mistake, *MEC* only informed students about the incorrect choice, but without any clarifying explanation. They indicated that the feedback lacked any comprehensive explanation and could be more detailed. They stated that the explanations why an answer was wrong could be presented in feedback.

Two students stated problems regarding Grammar Reference sections. They wanted Grammar Reference sections to present more examples and exercise items.

Six students stated the reasons for their discontentment. The lack of print materials and the obligation of the completion of the resources are the reasons for the discontentment. They complained about the fact that they were obliged to complete the assigned resources and were graded on their completion of the assigned resources. Another reason for their discontentment is the lack of print materials. They did not think *MEC* was useful as they had no tangible materials at hand. They indicated that studying

from a book or print materials especially for reading and grammar would be better as they were used to them.

CHAPTER 5

DISCUSSION AND CONCLUSION

The present study aims to explore the effects of an online LMS called *MEC* on Turkish EFL preparatory students' achievement and opinions in a Technical State University. The study employed a quasi-experimental design so as to realize this aim. The participants were the students of two A level classes in the Undergraduate Preparatory Program at İstanbul Technical University, one experimental and one control class. The first research question aimed to find out whether the use of *MEC* had an effect on the listening, reading, grammar, vocabulary and overall achievement of Turkish EFL university prep-students. The second question of the study is devoted to investigate the opinions of the students in the experimental class on the use of the *MEC* in their English learning. The data collection instruments were pre-test, progress test, post-test and student questionnaire.

This chapter is divided into four sections. In the first section, the findings of the study presented in the results chapter will be discussed followed by the pedagogical implications. Later, limitations of this study and suggestions for further research will be presented. At the end, the conclusion will be presented.

Discussion

Recent research (Al-Jarf, 2004; Al-Jarf, 2005; Bañados, 2006; Son, 2007; Pazio, 2010)

reveals that computer assisted language learning may provide a more satisfactory

learning experience to the learners. Blending traditional face-to-face teaching with

different uses of the computer is one of the ways that most language learners experience

computer assisted learning today (Neumeier, 2005) and this is called blended learning.

Thanks to blending learning, the benefits of the classroom and online environments can

be combined in a harmonious way. This can offer a more satisfactory learning

experience to our learners. However, the opinions of our learners and the learning

outcomes, namely students' achievement, in blended learning should be investigated

because this will show how satisfactory the implemented programs are. In addition, the

research will reveal tangible results indicating any significant or insignificant gains in

students' achievement, which will, in turn, reveal whether the programs really help the

learners improve their English.

This study investigated students' achievement and their opinions on learning

English as a foreign language in a blended learning environment that combines face-to-

face instruction with a particular commercial online LMS to supplement in-class

instruction. When pre-treatment, while treatment and post-treatment achievement of the

students in the control and experimental class were compared, it was found that there

were significant differences between the experimental and control class in terms of

overall, listening and reading achievement suggesting that achievement in the

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experimental group improved as a result of blending in-class instruction with online supplementary materials provided in the particular LMS used in this study.

The overall achievement of the experimental class steadily increased from pre-test to post-test while the overall achievement scores of the control class increased from pre-test to progress test, but decreased from progress test to post test. The improvement in the achievement of the experimental class went on gradually from pre-test to post-test suggesting that the resources in *MEC* ranging from different language exercises such as activities to practise reading, listening, grammar and vocabulary to reference tools including grammar reference units and *Macmillan English Dictionary Online*, helped students improve their English throughout the study.

The results of the progress test and post-test revealed that listening achievement of the experimental class was significantly better than the control class. This shows that the listening exercises in *MEC* which are presented in the form of gap-fill type-in, gap-fill drag and drop, rearranging words, phrases or sentences, multiple choice, true/false choice, check list helped students improve their listening. The students in the experimental class did these supplementary exercises in addition to the course book to improve their listening skills while the control class used only the course book. This finding coincides with the results of Bañados (2006) revealing a substantial improvement in students' listening achievement in a setting implementing blended learning model with a web platform called *UdeC English Online*. She indicated that the results support the success of the blended learning model implemented and students can

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succeed in their goal of learning English more effectively, given the state of the art of the information and communication technology.

The reading achievement of the experimental class improved from pre-test to post-test significantly while the reading achievement of the control class did not change. This reveals that the reading exercises in *MEC* including different types of texts on different topics focusing on different reading skills accompanied by different interaction types such as multiple choice, true/false choice, check list and authentic news items published weekly helped students improve their reading. This finding is consistent with findings of Levine, Ferenz and Reves (2000), who found that the computerized learning environments in which students were provided authentic texts accompanied by reading tasks via the class website contributed to the development of critical literacy skills in EFL academic reading course at a university setting more than the conventional learning environment. They indicate that the computer-networked environment combined the security and support of the language learning classroom and exposure to authentic reading material while improving students' reading.

In terms of grammar achievement, although outperformed in the pre-test, the control class caught up with the experimental class in the progress test and post-test. This finding on the grammar achievement is contrary to Al-Jarf (2005), who found a significant improvement in the grammar achievement of university EFL freshman students in a setting where online materials were used to supplement face-to-face in-class grammar instruction via *Nicenet*. However, in her study, the English proficiency level of the participants was low. In the present study, the participants were university

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EFL preparatory students whose English proficiency level was upper-intermediate. In a setting where students are at a low proficiency level, it may be easier to find out significant gains as they have only elementary knowledge of the content matter whereas, with high proficiency learners, the gains may be difficult to detect because the students having higher proficiency levels have already mastered more than the basics.

As for the results of the student questionnaire, nearly half of the students stated positive opinions about the convenience of *MEC*, which shows that the majority of the students find *MEC* easy to use. However, the search feature in *MEC* seems problematic as the percentage of the indecisive students is higher than the percentage of the students stating positive opinions while nearly one third of the students expressed negative opinions. This may be due to the difference in doing search in *MEC*, which required students to use minus and plus in queries when doing a search. This kind of search is different from searching on a conventional search engine. The students were not used to doing a search in this way.

Regarding the students' opinions on the resources in *MEC*, the results reveal that half of the students had positive opinions about the resources in *MEC*. However, almost half of the students seem to be indecisive as to whether resources were exactly fitting their needs. This may be because of the wide variety of the resources in general and omission of the resources particularly on writing in *MEC*. The participants of this study were the students in Undergraduate Preparatory Program. These students are required to study 30% of the courses in their faculties in English, which means the medium of the instruction in 30% of the course load is English. Therefore, they might find the resources

more than necessary. In addition, writing resources provided in the *MEC* were omitted in the study as they did not match with the preparatory program requirements; therefore, they were not used in the writing courses throughout the term. Moreover, not all the exam practice materials match with the Proficiency Exam, which they were going to take at the end of the term.

In terms of learning with *MEC*, nearly half of the students had positive opinions on their learning with *MEC*, which revealed that students found *MEC* helpful in their learning. This finding is consistent with findings of prior studies. Kung and Chuo (2002) investigated student's opinions in an instructional setting where students completed a series of online homework activities in EFL websites and found that students believed that learning English through online materials was effective. In another study implementing ready-made web activities that are pre-created language exercises and task-based web activities that require students to use the Web resources such as news, book or film reviews to complete different tasks, Son (2007) indicated that students found online materials contributed to their language learning with listening activities and by enabling them to find information quickly and easily on a specific topic, utilize the web at home to practise skills, learn new words through online dictionaries and test vocabulary knowledge. However, the learning outcomes of the students were not measured with a test that would show tangible statistical results.

In terms of the effectiveness of *MEC*, students seem to find it effective for listening most and then grammar and finally vocabulary. This finding on the listening is consistent with Bulut and AbuSeileek (2007), who investigated university students'

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attitude toward CALL and their achievement. They found that CALL was favored most for listening.

However, contrary to the students' overall positive opinions on the effectiveness of *MEC* in their listening, grammar and vocabulary learning, nearly half of the students disagreed that *MEC* helped them improve their reading. This finding coincides with the finding obtained by Lasagabaster and Sierra (2003), who investigated the attitudes of students towards CALL. The results of their study indicated that more than three quarters of the students using different CALL programs believed that they had improved their command of reading in English little or very little. To the students, reading from a book can be different from reading on the screen. Stracke (2007) points out that having a book for reading often seems to offer a more convenient way of having information available for studying and reading than a computer. The students in the experimental class had to do supplementary reading activities online for the first time, which was different from their conventional way of studying reading. They might find reading on the screen different and have difficulty in getting used to it.

Despite the students' mostly positive opinions of *MEC* in terms of convenience, resources and learning, the questionnaire revealed that nearly half of the students stated negative opinions about their satisfaction with *MEC*. This finding is contrary to the previous studies (Son, 2007; Al-Jarf, 2005; Al-Jarf, 2004). However, the number of online materials used is different in Son (2007). In his study, the participants only had to complete 8 online tasks whereas, in this study, students had to complete 200 online resources in total. It is clear that the number of online tasks in Son (2007) is

incomparable to the number of online tasks that students had to complete in this study. It is clear that the more task that the students have to do, the more likely they will feel overwhelmed.

In addition, contrary to the compulsory use of the LMS in this study, in Al-Jarf (2005) and Al-Jarf (2004), the use of the online program was not compulsory, that is, only the participants who were willing to use the program called *Nicenet* completed the online tasks. In this study, the use of *MEC* was compulsory for all the students and they knew that they were graded on their use, which put pressure on them. In a circumstance where students are obligatory to use such a system as part of their course work may affect their enjoyment. In the second part of the questionnaire, three students complained about the compulsory use of *MEC* and being graded on their completion of resources. They might not be ready for such a compulsory use.

Another reason for the dissatisfaction can be lack of print materials. In the comments section of the questionnaire, stating their discontentment, three students indicated that they did not think that *MEC* was useful as they had no tangible material at hand. They stated that they really need to have something in their hand when learning. This finding is consistent with the finding of Stracke (2007). In her study, she found out that one of the reasons why students dropped out blended courses was a perceived lack of usage of the paper medium. Students studying in an online environment for the first time may not get used to studying without print materials, which they were used to and appreciated. Stracke (2007) points out that the paper medium provides 'tangibility' and greater flexibility regarding the place of learning for the students because paper

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materials give language learners a sense of possessing something and thus a feeling of tangible reassurance.

Furthermore, in the report on the most significant observations from the Hybrid Course Project at the University of Wisconsin, one of the issues that Aycock, Garnham, and Kaleta (2002) state is that students don't grasp the blend, which is what they call hybrid, concept readily. Although students today are very technology oriented in their daily lives, they may not be the same in their learning. They also indicate that many of the students don't perceive time spent in lectures as "work", but they see time spent online as "work", even if it is time they would have spent in class in a traditional course. Playing games or e-mailing is nothing like studying because students sometimes find studying a tedious job, so this may not change even with the use of technology.

Pedagogical Implications

The findings of this study offer several implications for the use of technology in instruction in EFL context. The current study revealed significant achievement differences in reading, listening and overall achievement in English in a context where face-to-face teaching was blended with an online program. Blending face-to-face teaching with an online program as supplementary can be used to improve the achievement of students studying English as a foreign language (Al-Jarf, 2004; Al-Jarf, 2005; Bañados, 2006; Pazio, 2010). Teachers can assign complementary resources to

students to improve their learning and make them engaged with English outside the class.

However, how to use online programs or when to integrate them into the face-to-face instruction are important questions while designing blending learning courses. Careful thinking and planning before implementation are important stages in order to find the most effective and efficient combination of the two modes of learning. The aim should be to employ a balanced approach employing suitable roles to learners' needs and teaching context (Allan, 2007; Littlejohn & Pegler, 2007).

Apart from the integration of online programs to the face-to-face instruction, students can also use such programs as self-study to improve their English. This creates a more student-centered learning as students have a chance to study what they need and want to learn in their own time and at their own pace. They are not limited to the class context and the teacher to learn. All they need is a computer and the Internet connection.

In integrating online programs to face-to-face teaching, an important issue is to choose an appropriate program to the learners and context. Therefore, different features of the program must be carefully evaluated. One of the most important features that must be provided in an online program is the interaction between individuals. Student-student communication must be enabled via forum pages and messaging as well as teacher-student interaction. Lee and Chan (2008) suggest that, for co-construction of knowledge, web-based technology should be used as communication tools and collaborative tools to facilitate interactions among the learners and the teachers throughout the whole learning process. This creates a more socially supported environment for the learners.

Another important feature is the design of the program. The design of the pages must be user-friendly, smooth and clear to the students. In this study, more than half of the students indicated the problems regarding resource page designs of *MEC*. The font size of the texts and their presentation are important. When working in the program students start to feel eye tiredness and boredom, which can have an effect on their enjoyment and interest in the program.

Moreover, the feedback provided in the program must be in detail. In this study, one of the problems indicated by the students is that the feedback lacked any comprehensive explanation and could be more detailed. Similarly, in a study by Lasagabaster and Sierra (2003), the results revealed that students were concerned about the lack of any comprehensive explanation in the feedback. When a mistake was made, the only information provided to the student is their incorrect choice, but without any clarifying explanation. In fact, this issue can be considered as a pedagogical weakness that needs to be addressed in an online program.

If students use online programs for the first time in their learning either optionally or compulsorily, it will take some time to get used to them. The way students are used to studying should be taken into consideration. They generally value print materials in their learning. Stracke (2007) suggests that there is a need to carefully plan a blended course, providing students with comprehensive teacher and document guidance and ensuring transparent connections between the two modes of instruction.

Limitations and Suggestions for Further Research

Although the study found statistically significant differences between the control and experimental class in terms of their achievement, it must be considered within its limitations. There are some limitations that need to be acknowledged and addressed that may influence the findings of this study.

The first limitation resided in this study is that this study was limited to 72 upper-intermediate level Turkish students studying English as a foreign language at one technical state university in Turkey. The findings of this study may not be directly generalized to other proficiency levels in ITU School of Foreign Languages and other state universities. It is difficult to draw generalizations as the sample size was small. Further research could replicate this study in different schools with a larger sample size having different English proficiency levels. More significant differences may be found with students having lower English proficiency levels. The results would have been more promising if the study had been carried out with a larger number of students.

Secondly, there are teacher-related limitations in the study. The teachers of the experimental and control classes were different because of the administrative reasons. In addition, one of the teachers in the control group was a native speaker of English. Therefore, there might have been teacher-related differences between the classes. The same study could be replicated with the same teacher(s) teaching both the experimental and control class in order to eliminate teacher related differences between the classes.

Another teacher-related limitation is that, in the experimental class, there were two teachers; one was the researcher as the integrated course teacher and the other was another teacher as the basic course teacher. Information on the implementation by the basic course teacher was limited. Only the number of the resources was known to the researcher. The implementation, scope and the purpose of the assigned resources were not revealed. On top of this, the teachers of the experimental class, both the researcher and the basic course teacher, used such a system in their professional life for the first time.

Although the background questionnaire revealed that the students were used to using computers and the Internet, it also indicated that they were not used to instructional practices involving a LMS. In the beginning of the study, it took time to get students to use *MEC* properly. Much more reliable and different results could be obtained if the treatment could last for a longer period. As this study was completed in ten weeks, it is recommended that conducting a longitudinal study over a period of a full term or year would be helpful to obtain more reliable and generalizable data because learning is as a process and conducting a study in a longer period could lead to different results.

Apart from this, the students of the experimental class had to use *MEC* as well as following the requirements of the general curriculum, therefore; they were overloaded by the tasks and the activities required for the study. Some days, they complained that they were quite tired because of the assignments and tasks that they were obliged to do.

New studies could be conducted to see the effects of the LMS used in this study in reduced class hour context on students' academic achievement.

All of the assignments and tasks were carried out on *MEC*, which required the use of computers and the Internet. When students sometimes had some problems with their computers and the Internet connection, this resulted in the delay of the delivery of some of the assignments and frustration on the part of the students.

Another limitation is related to the reliability of the student questionnaire. The questionnaire was designed for this particular study considering the implementation of *MEC* and context of the study. Apart from this, reliability of the student questionnaire used in this study is limited to the honesty of the students' responses. In other contexts, different results could be obtained on the reliability of the questionnaire.

Moreover, the tests that students were given throughout the study were made up of different item types. Other studies using the tests that will be made up of the same item types should be conducted in order to eliminate the measurement error threat.

Last but not least, this study investigated the effects of a commercial product. It must be noted here that the purpose has not been to endorse or to discredit any product available in the market, but to understand to what extent this LMS is effective and useful in ITU School of Foreign Languages class context in terms of learning outcomes and students' opinions. Use of other LMSs, either open-source or commercial, can be investigated in other studies with the same scope of this study.

Conclusion

The use of computers has become fundamental in this era, as shown by their widespread

acceptance and utilization in every field of life. The learners of our time utilize them in

their lives and learning skillfully, which makes them fundamentally different from the

previous generations (Prensky, 2001; Conole, 2008; Oblinger& Oblinger, 2005; Baird &

Fisher, 2005-2006). Keeping these changes in mind, the aim of language teaching should

be following the advancements in technology and change in the learners' studying in

order to provide an efficient and valuable learning experience to the learners.

In language teaching and learning, computers serve us in different roles

(Warschauer, 1996b; Warschauer & Kern, 2000; Fotos & Browne, 2004; Warschauer,

2004). The Internet and different software programs offer great opportunities enabling

communication and access to authentic materials (Acar, 2007; Ciekanski& Chanier,

2008; Shetzer& Warschauer, 2000; Hanson-Smith, Egbert& Buell, 2007).

Blended learning, which involves the integration of online tools and materials

with traditional face-to-face learning, has been considered as an important and valuable

way of using computers in language learning and teaching as the inherent strengths and

weaknesses associated with the online environments and the class environment have

been recognized (Osguthorpe and Graham, 2003). Blended learning can be used to

combine the benefits of these two environments in a harmonious way. Learners can

review online resources as often or as much as they need/want, which addresses varying

learning styles or needs of those who might need extra practice creating a more learner-

centered environment. Apart from this, learners and teachers can be connected anytime and anywhere, without being time, place, or situation bound. This creates a socially supported environment and constructive learning experience for learners.

However, it must be noted that while we are using computers in language learning, researching and evaluating different aspects of them is indispensable (Beatty, 2003). The uses of computers in language learning need to be evaluated not only by designers and teachers, but also by students before their value can be fully determined (Kessler & Plakans, 2001; Lasagabaster & Sierra, 2003; Neumeier, 2005). In line with this reason, this study was conducted as an attempt to gather information from the students.

This study offers some insights into this issue by showing a group of university upper-intermediate level EFL students' engagement in a particular online commercial LMS as part of their courses. The results indicate that in teaching English blending face-to-face teaching with an online LMS can be beneficial over solely in-class teaching by providing an extensive range of authentic materials as well as a more learner-centered medium of instruction, which can complement classroom-based activities.

APPENDICES

APPENDIX A: BACKGROUND QUESTIONNAIRE

Name and Surname: _____

This survey is to gather some background information about you. Please complete the blanks or circle your answers after reading the questions carefully. We keep all responses strictly confidential

1. Age: _____

2. Male ( )   Female ( )

3. Nationality: _____

4. High school graduated from:_____

5. Have you studied English before?   Yes ( )   No ( )

6. If yes, for how long? _____

7. Have taken a prep-class in high school or secondary school? Yes ( )   No ( )

8. Do you have a computer at home/ dormitory? Yes ( )   No ( )

          If yes, for how long: _____

9. Do you have the Internet connection at home/ dormitory? Yes ( )   No ( )

10. Do you use the Internet?   Yes ( )   No ( )

11. How often do you use the following?

World Wide Web   : a lot ( )   a little ( )   never ( )

E-mail : a lot ( ) a little ( ) never ( )

Chat (e.g. Messenger) : a lot ( ) a little ( ) never ( )

SocialNetworking (e.g. Facebook) : a lot ( ) a little ( ) never ( )

Weblog : a lot ( ) a little ( ) never ( )

Learning Management System (LMS): a lot ( ) a little ( ) never ( )

12.   Please rate your knowledge of computers:

Poor ( )   Fair ( )   Good ( )   Very good ( )   Excellent ( )

13.   Please rate your typing ability:

Poor ( )   Fair ( )   Good ( )   Very good ( )   Excellent ( )

14.   Please rate your expertise in using web browsers (e.g. Windows Internet Explorer, Mozilla Firefox, Apple Safari)

Poor ( )   Fair ( )   Good ( )   Very good ( )   Excellent ( )

The aim of this questionnaire is to find out what you think about the online program, Macmillan English Campus, which you have used in the English preparatory program this term. We believe that your responses will be beneficial in order to assess the suitability of this online English language learning program for our school. Please answer the questions below and try to be as honest as possible. There are no right or wrong answers.

PLEASE ANSWER IN THE LANGUAGE YOU FEEL MOST COMFORTABLE WITH.

Thank you very much for taking time to complete this questionnaire.

Hatice Bilgin

	STRONGLY DISAGREE	DISAGREE	NOT SURE	AGREE	STRONGLY AGREE
1. MEC is easy to use.					
2. MEC records my learning performance in a way that I can understand easily.					
3. MEC makes it easy for me to evaluate my learning performance.					
4. The resources provided by MEC are easy to understand.					
5. MEC makes it easy for me to find the resources I need.					
6. MEC provides resources that exactly fit my needs.					
7. MEC provides useful resources.					
8. MEC has provided a wide variety of learning					

resources.					
9. MEC has helped me improve my reading.					
10. MEC has helped me improve my listening.					
11. MEC has helped me improve my vocabulary.					
12. MEC has helped me improve my grammar.					
13. MEC has enhanced my English learning experience.					
14. MEC has given me control over my learning.					
15. I feel confident to learn on MEC in my own time.					
16. I feel confident to learn on MEC at my own pace.					
17. I am satisfied with my learning experience with MEC.					
18. I am satisfied with the resources in MEC.					
19. I have enjoyed using MEC.					

What other feature(s) do you think MEC should have?

_____
_____
_____
_____
_____
_____

Additional comments:

_____
_____
_____
_____
_____
_____
_____

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 4 / Oct, 19-23	
Course *Active Skills* 3 Unit 4 *From paragraph to Essay* Unit 3 *Contemporary Topics 2* Unit 3 *Language Leader* Upper-int. Unit 3 & Unit 4	Program Academic English with IELTS UNIT3 Take a look at future forms Future predictions and intentions in academic English (Grammar Reference Unit) Modal verbs for general possibility in academic English (Grammar Reference Unit) UNIT 9 Choose the right verb forms Present continuous in academic English (Grammar Reference Unit) Past simple and present perfect in academic English (Grammar Reference Unit) Passive verb forms in academic English (Grammar Reference Unit) Noun-verb agreement in academic English (Grammar Reference Unit) Verb + preposition + -ing form in academic English (Grammar Reference Unit) UNIT 2 Use reading strategies Active reading (Language Exercise) Neuromarketing (Language Exercise) Listen with a purpose Planet or asteroid? (Listening Activity) Tips for effective language learning (Listening Activity)

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 5 / Oct, 26-30	
Course *Active Skills 3* Unit 5 *From Paragraph to Essay* Unit 4 *Contemporary Topics 2* Unit 4 *Language Leader* Upper-int. Unit 4 & Unit 5	Program Academic English with IELTS Unit 6 Convey the right message Comparing and contrasting in academic English (Grammar Reference Unit) Cause and effect in academic English (Grammar Reference Unit) Conditionals for logical results in academic English (Grammar Reference Unit) Purpose in academic English (Grammar Reference Unit) The language of academic texts Vocabulary Activity Extra Reading Listening and Writing Learning from lectures Listening Activity Why go to lectures? Listening Activity Individual learning styles Language Exercise

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 6 / Nov, 2-6	
Course *Active Skills 3* Unit 6 *From Paragraph to Essay* Unit 5 *Contemporary Topics 2* Unit 5 *Language Leader* Upper-int. Unit 5 & Unit 6	Program Academic English with IELTS UNIT3 Get some IELTS reading and listening practice Academic Reading Passage 1: Business awards (Task 1) (Exam Preparation Exercise) Academic Reading Passage 1: Business awards (Task 2) (Exam Preparation Exercise)

	Academic Reading Passage 1: Business awards (Task 3) (Exam Preparation Exercise)
	Listening Section 1: Making music (Task 1) (Exam Preparation Exercise)
	Listening Section 1: Making music (Task 2) (Exam Preparation Exercise)
	Academic Reading Passage 2: Houses of the future (Task 1) (Exam Preparation Exercise)
	Academic Reading Passage 2: Houses of the future (Task 2) (Exam Preparation Exercise)
	Academic Reading Passage 2: Houses of the future (Task 3) (Exam Preparation Exercise)
	UNIT 5
	Summarize it!
	Health and belief (Language Exercise)
	Take note!
	A biography of Andy Warhol (Listening Activity)
	Extra Reading Listening and Writing
	Higher education in the United States today Vocabulary Activity
	Can money buy you happiness?
	Language Exercise
	Word formation in academic texts
	Vocabulary Activity

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening	
Program: *Macmillan English Campus*	
Week 7 / Nov, 9-13	
Course	Program
Active Skills 3 Review 1 & 2	Academic English with IELTS
From Paragraph to Essay Unit 6	UNIT 2
	Visiting Papua New Guinea (Language
Language Leader Upper-int.	Exercise)
Unit 6+ Revision	Earth hour (Language Exercise)
	UNIT 8

	Complete tables and diagrams
	Welcome talk (Listening Activity)
	The geology of Glencoe (Language Exercise)
	The 'Four Ps' of marketing (Listening Activity)
	Extra Reading Listening and Writing
	The technological revolution in education Language Exercise
	Support networks on campus Vocabulary Activity
	Globalization and economic inequality Language Exercise
	Trade v aid Listening Activity

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening	
Program: *Macmillan English Campus*	
Week 8 / Nov, 16-20	
Course	Program
Active Skills 3 Unit 7	Academic English with IELTS
From Paragraph to Essay Unit 7	UNIT 2
Contemporary Topics 2 Unit 6	Mahatma Gandhi (Listening Activity)
	The effects of climate change (Listening Activity)
Language Leader Upper-int.	Schools in the UK (Listening Activity)
Unit 7	Work out the meaning of words
	Impressionism (Vocabulary Activity)
	The poetry of Emily Dickinson (Language Exercise)
	Extra Reading Listening and Writing
	Innovations in sustainable energy Listening Activity
	Computers and e-learning Vocabulary Activity
	Eliminating plastic bags Vocabulary Activity
	Wind turbines: green energy without a cost? Language Exercise
	CEFR Level B2
	Unit 7

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	Bussiness: Making Presentations (Presentation) Planning a presentation Attending a presentation Advice about giving presentations What is the speaker talking about? Mind-mapping techniques in meetings

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 9 / Nov, 23 – 27 (Kurban Bayramı)	
Course *Active Skills 3* Unit 8 *From Paragraph to Essay* Unit 7 *Contemporary Topics 2* Unit 7 *Language Leader* Upper-int. Unit 7 & Unit 8	Program Academic English with IELTS UNIT 6 Get some more IELTS reading and listening practice Academic Reading Passage 3: Language myths (Task 1) (Exam Preparation Exercise) Academic Reading Passage 3: Language myths (Task 2) (Exam Preparation Exercise) Academic Reading Passage 3: Language myths (Task 3) (Exam Preparation Exercise) (overlapping items with CEFR Unit 2 - Education: Learning Languages) Listening section 2: What's on? (Exam Preparation Exercise) Academic Reading Passage 1: Memory (Task 1) (Exam Preparation Exercise) Academic Reading Passage 1: Memory (Task 2) (Exam Preparation Exercise) Academic Reading Passage 1: Memory (Task 3) (Exam Preparation Exercise) Extra Reading Listening and Writing Music and personality Language Exercise The Old Vic Theatre Language Exercise Understanding the web Language Exercise

MEC WEEKLY PLAN
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 10 / Nov, 30 – Dec, 4

Course	Program
Active Skills 3 Unit 9 *From Paragraph to Essay* Unit 7 *Contemporary Topics 2* Unit 8 *Language Leader* Upper-int. Unit 8 & Unit 9	Academic English with IELTS UNIT 8 Interpret statistics Life expectancy by country (Language Exercise) Health statistics (Web Project) Identify opinions The energy of the future (Listening Activity) Pride and Prejudice (Language Exercise) A world of Scottish invention (Language Exercise) Complementary medicine (Language Exercise) Extra Reading Listening and Writing Statistics in the media Listening Activity Interactive advertising Vocabulary Activity Alternative medicine today Vocabulary Activity

MEC WEEKLY PLAN
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 11 / Dec, 7 – 11

Course	Program
Active Skills 3 Unit 10 *From Paragraph to Essay* Unit 8 *Contemporary Topics 2* Unit 9 *Language Leader* Upper-int. Unit 9 & Unit 10	Academic English with IELTS UNIT 11 Pay attention to key words Ecotourism (Listening Activity) Principles for success in modern business (Listening Activity) Understand long descriptions Holidays with a conscience (Listening Activity)

China's Terracotta Army (Language Exercise)
Use appropriate language and punctuation
The psychology of happiness (Vocabulary Activity)
Get it write! (Language Exercise)
On your mark (Language Exercise)
Extra Reading Listening and Writing
Comedy in culture   Listening Activity
Bottled water: a critical review Language Exercise
From the bottle or the tap?   Language Exercise
Is globalization working?   Language Exercise

MEC WEEKLY PLAN
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 12 / Dec, 14 – 18

Course	Program
Active Skills 3 Unit 11 *From Paragraph to Essay* Unit 8 *Contemporary Topics 2* Unit 10 *Language Leader* Upper-int. Unit 10& Unit 11	Academic English with IELTS UNIT 9 Get some IELTS listening, reading and writing practice Academic Reading Passage 2: Interviews (Task 1) (Exam Preparation Exercise) Academic Reading Passage 2: Interviews (Task 2) (Exam Preparation Exercise) Academic Reading Passage 2: Interviews (Task 3) (Exam Preparation Exercise) Listening Section 3: Business communication (Task 1) (Exam Preparation Exercise) Listening Section 3: Business communication (Task 2) (Exam Preparation Exercise) Academic Reading Passage 3: Sight and memory (Task 1) (Exam Preparation Exercise) Academic Reading Passage 3: Sight and memory (Task 2) (Exam Preparation

	Exercise) Academic Reading Passage 3: Sight and memory (Task 3) (Exam Preparation Exercise) Academic Writing Task 1 (Sample Essay) Extra Reading Listening and Writing The United Nations Language Exercise Super Groups Vocabulary Activity

MEC WEEKLY PLAN	
Course: A Level Reading – Writing - Listening Program: *Macmillan English Campus* Week 13 / Dec, 21 – 25	
Course	Program
Active Skills 3 Unit 12 *From Paragraph to Essay* Unit 8 *Contemporary Topics 2* Unit 11 *Language Leader* Upper-int. Unit 11& Unit 12	Academic English with IELTS UNIT 2 Use reading strategies Caring for the elderly (Language Exercise) Listen with a purpose Tsunamis (Listening Activity) UNIT 5 Take note! A great British leader (Listening Activity) The Northern Lights (Listening Activity) The National Health Service (Listening Activity) Extra Reading Listening and Writing Agreeing to disagree Vocabulary Activity Health effects of banning smoking Vocabulary Activity The economics of poverty Listening Activity

A LEVEL WEEKLY PACING SCHEDULE YEAR 2009-2010
WEEK 8 (Nov. 16-20)

SKILLS 12 hrs.

READING 6 hrs.

WRITING + LISTENING 6 hrs.

READING

ACTIVE SKILLS for READING 3

UNIT 7 (pg. 103-114) HEALTH

Chapter 1 (pg. 104-108): Successful Dieting

At the completion of this chapter, students will be able to:

- Scan the text to find specific information,

- Answer comprehension questions accurately,

- Match the vocabulary items that appear in the text with a definition accurately,

- Complete sentences with appropriate vocabulary items from the text.

- Create word webs effectively.

Chapter 2 (pg. 109-114): Survival at the South Pole

At the completion of this chapter, students will be able to:

- Skim the text to check predictions,

- Decide whether the statements about the reading text are true or false,

- Complete sentences accurately according to the information in the text,

- Complete sentences correctly using the vocabulary items from the text,

- Use the prefixes *over-* and *under-* accurately to complete sentences

WRITING

FROM PARAGRAPH to ESSAY

UNIT 7 (pg. 82-91) CAUSE/EFFECT ESSAY

At the completion of this unit, students will be able to:

- Differentiate a cause and effect essay,

- Use parallel structures to form appropriate thesis statements,

- Correct sentences that do not follow parallelism rule.

* There is no assignment for this week as there is Writing Portfolio Exam 1 on Wednesday.

PRESENTATION

MATERIALS FOR WEEK 8

- Each group will hand in the *template* stating their narrowed down topic to the teacher. Once the teacher acknowledges their presentation topics, the students can start their research and rehearsals.

- They will learn how to end/conclude their presentations.

LISTENING

UNIT 6 (45-53) IMMIGRATION: BOUND for THE UNITED STATES

At the completion of this unit, students will be able to:

- Use columns to note dates and numbers

- Answer multiple choice questions based on a lecture using their notes,

- Complete the given sentences using their notes,

Answer open-ended questions based on their notes.

APPENDIX E: CONFIDENCE INTERVALS FOR THE GIVEN TESTS

	95% Confidence Interval of the Difference	
	Lower	Upper
Pre-test overall	63,8092	69,4451
Progress test overall	67,9505	73,1682
Post-test overall	69,6780	74,3898
Pre-test listening	73,9991	83,2551
Progress test listening	48,1060	57,7245
Post-test listening	51,3633	61,7892
Pre-test reading	71,9383	80,2650
Progress test reading	72,0415	78,4670
Post-test reading	80,7736	88,1078
Pre-test-grammar	55,1402	62,4530
Progress-test grammar	74,3198	79,3073
Post-test grammar	71,4281	76,9109
Pre-test vocabulary	47,9588	58,5835
Progress test vocabulary	65,0825	75,9683
Post-test vocabulary	52,9293	64,3588

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