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AN INVESTIGATION ON MULTIMEDIA LANGUAGE
LABORATORY IN TURKISH STATE UNIVERSITIES

A MASTER'S THESIS

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ABSTRACT**AN INVESTIGATION ON MULTIMEDIA LANGUAGE LABORATORY IN
TURKISH STATE UNIVERSITIES**

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MA. Program of Teaching English as a Foreign Language

Supervisor: Asst. Prof. Dr. Julie Mathews-Aydınlı

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This study aims to investigate students', teachers', and administrators' attitudes towards the use of multimedia language laboratories (MLLs) at Turkish state universities. The study also explores the factors that affect the respective stakeholders' attitudes towards using MLLs in English language instruction. A further aim of this study is to reveal the reported use of MLLs in Turkish EFL context and the reasons of teachers for not using them.

This study was carried out with 510 EFL learners, 61 instructors, and five administrators at 16 state universities in Turkey. The data were collected through questionnaires, interviews, and emails. The questionnaires were administered in the aim of eliciting the attitudes of the students and teachers towards the use of MLLs in English classes. Similarly, the qualitative data obtained from the interviews conducted with the administrators and email correspondence with instructors revealed how the directors of Schools of Foreign Languages perceive MLLs and how

they promote the use of this technology, and instructors' reported reasons for not utilizing MLLs for language teaching purposes.

The results of the study indicated that students, teachers, administrators are positive in general to the integrating MLLs into language teaching and learning. One-way ANOVA test conducted showed that age is an important factor in students' liking MLLs, and the type of the software used in MLLs is a key determinant of teachers' positive overall attitudes towards the MLL use. The study also revealed certain issues to be considered for a successful integration of MLLs in English language teaching.

Keywords: Multimedia language laboratory (MLL), computer assisted language learning (CALL), technology in ELT

ÖZET

TÜRKİYE’DEKİ DEVLET ÜNİVERSİTELERİNDEKİ MULTİMEDYA DİL LABORATUVARLARI ÜZERİNE BİR ARAŞTIRMA

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Yüksek Lisans, Yabancı Dil Olarak İngilizce Öğretimi Bölümü

Tez Yöneticisi: Yrd. Doç. Dr. Julie Mathews-Aydınlı

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Bu çalışma Türkiye’deki devlet üniversitelerinde bulunan öğrenci, öğretmen ve yöneticilerin multimedya dil laboratuvarlarına karşı tutumlarını araştırmayı amaçlamaktadır. Bu çalışma aynı zamanda ilgili tarafların İngilizce dil eğitiminde multimedya dil laboratuvarı kullanımına karşı tutumlarını etkileyen faktörleri de incelemektedir. Bu çalışmanın diğer bir amacı da; Türkiye’de yabancı dil olarak İngilizce öğretiminde multimedya dil laboratuvarlarının bildirilen kullanımını ve kullanmayan öğretmenlerin sebeplerini ortaya çıkarmaktır.

Bu çalışma; Türkiye’de 16 farklı devlet üniversitesinde bulunan İngilizceyi yabancı dil olarak öğrenen 510 öğrenci, 61 öğretmen ve 5 yönetici ile uygulanmıştır. Veriler; anketler, görüşmeler ve e-postalar aracılığıyla toplanmıştır. Anketler İngilizce sınıflarında öğrenci ve öğretmenlerin multimedya dil laboratuvarlarına karşı tutumlarını ortaya çıkarma amacıyla verilmiştir. Aynı şekilde; yöneticilerle yapılan görüşmelerden ve öğretmenlerle yapılan e-posta yazışmalarından elde edilen nitel veriler; Yabancı Diller Yüksekokulu yöneticilerinin multimedya dil laboratuvarlarını

nasıl algıladıkları ve bu teknolojinin kullanımını nasıl teşvik ettiklerini ve öğretmenlerin dil öğretimi amacıyla multimedya dil laboratuvarlarından yararlanmama sebeplerini ortaya çıkarmıştır.

Bu çalışmanın sonuçları öğrencilerin, öğretmenlerin ve yöneticilerin genel olarak multimedya dil laboratuvarlarını dil öğrenim ve öğretimine entegre edilmesine karşı olumlu olduklarını ortaya koymuştur. Yapılan tek yönlü ANOVA testi yaşın öğrencilerin multimedya dil laboratuvarlarını sevmelerinde; laboratuvarda kullanılan yazılım türünün ise öğretmenlerin bu laboratuvarların kullanımına karşı genel pozitif yaklaşımlarında anahtar bir belirleyici olduğunu göstermiştir. Bu çalışma ayrıca multimedya dil laboratuvarlarının İngilizce dil öğretimine başarılı entegrasyonu için düşünülmesi gereken belirli konular ortaya çıkarmıştır.

Anahtar kelimeler: Multimedya dil laboratuvarları, bilgisayar destekli dil eğitimi, İngilizce öğretiminde teknoloji

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CHAPTER I: INTRODUCTION

Introduction

“Don't bother me, Mom, I'm learning!” This is not just a name of a book (Prensky, 2009) but a statement drawing a clear picture of the current situation, which might occur in any house where a child and a technological tool such as laptop, ipad, or cell phone *'reside'* together. In his book, Prensky (2009) mentions about how computers are preparing digital natives, that is, kids, for 21st century success and how digital immigrants, that is, moms, can help them. The broader the gap between these digital generations grows, the more difficult it becomes for the digital natives and immigrants to understand each other. This statement is also true for a teacher and his/her students. Technology in the class has the potential to either help the teaching and learning environment, or disturb it.

In parallel with the introduction of new technologies and broader adoption of existing technologies, the field of computer-assisted language learning (CALL) is also constantly undergoing change because of technological innovation. Therefore, this situation might regularly provide us with new opportunities to examine the field from new perspectives (Beatty, 2010). Since CALL is a young branch of applied linguistics and is still establishing its directions, it offers many opportunities for researchers, an example of which is language labs. In fact they have been the focus of considerable research; however, since the field itself demands new research as I stated earlier, they should be investigated from different aspects. Also, what makes language labs so demanding for a researcher is that today they are not like their traditional versions, but have a new appearance with many up-to date facilities. In

traditional labs, for example, one of the most common reported problems for teachers is that they hinder classroom management, allowing a student to go off task when the teacher is dealing with others. However, thanks to new technological developments, the new multimedia language labs (MLLs) appear to resolve this problem, providing teachers with tools to maintain control and direct the process accordingly. At this point, some crucial questions should be raised. Is this the case? Do MLLs really solve the problems that exist in traditional labs? Can they really facilitate teaching and learning more effectively? Since all Turkish state universities have now been equipped with these new MLLs, there is a need for a research which presents a current picture of MLLs throughout Turkey and reveals how they are actually being used and what are the attitudes of all stakeholders in these universities.

Background of the Study

Technology influences many aspects of our lives, language learning included. In recent years, computers have been regarded as one of the most prominent technological tools and they have played a crucial role in English language teaching. Recent studies demonstrate the effectiveness of the use of technology-based learning as an effective method in language learning (Xiaoqiong & Xianxing, 2008). Since the late 1960s, many institutions have provided their students the opportunity to make use of language labs, which became popular in secondary schools and other institutions in the late 1960s and early 1970s (Davies et al., 2005). Thanks to new technological developments, language labs have turned into multimedia language labs (MLLs) designed with special software, and allowing for a variety of offline and online activities. These MLLs differ from older analogue language labs in several key aspects such as in nature and functionality, and also in terms of what they require from the teacher (Vanderplank, 2010).

As many institutions see their benefits and aspire to keep abreast with technological developments, they have invested in these up-to-date labs and included them in their curricula. With the same purpose, in 2012, the Council of Higher Education in Turkey initiated a nation-wide project, in which all state universities were equipped with MLLs. The idea behind this project was to facilitate English language learning and teaching at universities. The project was comprised of three main components: Sanako 1200 software program, which is both an online and offline multimedia teaching environment, AdobeConnect, and NetLanguages. Sanako 1200 was supposed to be installed in the computers in MLLs. However, teachers and students were supposed to be provided a username and a password to use the other two programs.

A number of studies have been undertaken by researchers in order to examine the implementation of MLLs in education, and researchers have identified findings indicating some concerns for teachers (Chen, 2008; Smerdon et al., 2000; Kim, 2002; Banados, 2006). For example, Chen (2008) states that teachers should understand available technological tools for a particular task and the strategies for using these tools. Also, a report on American public teachers' use of technology (Smerdon et al., 2000) reveals that inadequate computers and lack of time for teachers to learn how to use computers are great barriers to implementing computer-based instruction. Furthermore, today's CALL settings bring more roles for teachers by requiring them to be material designers and developers, scriptwriters, managers and producers of media resources, technical advisors and online language tutors (Banados, 2006). Similarly, Arneja, and Amandeep (2012) list some challenges faced by language teachers and students in Indian classrooms. They argue that in many instances, proper facilities are not provided by the institutions, language teachers are not

properly trained, and mostly the teaching focuses on lectures rather than on infusing techniques to be used in language labs; therefore, very limited time in the labs is devoted to the actual training of the four language skills. Shin and Son (2007) also found that Korean teachers of English had difficulties in using computers in language teaching. The most common reasons for not using computers included limited computer facilities, lack of class hours, teachers' inefficient computer skills and technical problems.

There is a relationship between an individual's knowledge and experience and his/her attitudes towards a particular idea, which mutually affect each other. Teachers' and students' behaviors are also affected by attitudes (Freedman & Carlsmith, 1989). Therefore, it is important to explore their attitudes towards use of MLLs in language learning and teaching. For example, Kim (2002) states that teachers' attitudes towards any newly introduced technology are of great importance for a successful implementation of computer-assisted language learning (CALL). In addition, language instruction can be improved by teachers' positive attitudes and willingness to integrate new technologies into their teaching (Koehler & Mishra, 2009). Similarly, researchers have shown that students generally have positive attitudes toward the use of computers for language learning (Fujieda, 1999; Levine, Ferenz & Reves, 2000). For example, Ayres (2002) investigates students' attitudes towards the use of CALL and put forward that learners appreciate and value the learning and the time they spend in labs. In the same study, it was revealed that most of the students perceive language labs as relevant to their needs and believe that they should spend more time in the labs.

Studies have also suggested that computers have many benefits for students. For instance, Beatty (2010) observes that multimedia is thought to be helpful for

students to become more autonomous learners by presenting opportunities for them to study on their own, independent of a teacher and can also provide opportunities for them to control their own learning. Sadeghi and Dousti (2012) report another important point worth noticing about the benefits of computers for students. They observe that the capacity of computers for providing immediate feedback on learners' performance enhances students' learning from their own mistakes in a stress-free atmosphere, since the feedback can be given in the absence of the teacher. Furthermore, Arno-Macia (2012) states that computers function as a gateway allowing learners to bridge the gap between the learning situation and professional contexts by engaging them in genuine interaction and collaboration with other learners worldwide.

The aforementioned studies have revealed how the use of CALL and MLLs in particular can present challenges to teachers (Chen, 2008; Smerdon et al., 2000; Kim, 2002; Banados, 2006), benefits (Beatty, 2010; Sadeghi & Dousti, 2012; Arno-Macia, 2012), and drawbacks to both teachers and students (Arneja & Amandeep, 2012; Shin & Son, 2007). However, a literature review reveals that no research has been found that surveyed how multimedia language labs are currently being used in Turkey. Therefore, this present study aims to fill this gap.

Statement of the Problem

The attitudes of EFL students and teachers towards CALL have been the focus of a significant amount of research (Albirini, 2006; Almekhlafi, 2006; Bordbar, 2010; Gilakjani, 2012; Wang & Heffernan, 2010) and several attempts have been made to look at students' and teachers' attitudes towards the use of technology in language teaching in Turkey (Akcaoglu, 2008; Goktas et al., 2008; Karakaya, 2010; Celik, 2012; Yuksel & Kavanoz, 2011). Similarly, the attitudes of EFL students and

teachers towards multimedia language labs (MLLs) have also been addressed in several small-scale studies (Huang & Liu, 2000; Kirubahar et al., 2010; Meenakshi, 2013; Patel, 2013; Sarfraz, 2010; Tarasiuk, 2010; Waganer, 2006). There has been limited research undertaken on MLLs in Turkey (Okan, 2008; Sarıçoban, 2013); however, the former is a small-scale study investigating just students' perceptions and the latter is a large-scale study but investigates pre-service ELT teachers' attitudes towards computer use. Therefore, there is a need to explore what are the attitudes of all stakeholders at the tertiary level towards MLLs, the reported use of MLLs, and the factors that may be affecting these attitudes.

Although language labs have been in use for many years in Turkey, MLLs, which were established in every Turkish state university in 2012, are relatively new; therefore, little is known about how they are actually being used for language teaching purposes. Although a lot of money has been invested in these labs, they have some potential problems which might hinder the use of them. It has been reported that they are not used to their full potential, that is, their functionality is under-exploited. The main reason for this problem is teachers' design of inappropriate pedagogical activities and their lack of training in how to incorporate technology into their instruction. Thus, this study will be a starting point to show the overall picture of MLL use for language teaching purposes in Turkish state universities and views of all stakeholders at these universities. Based on this problem, the present study will contribute to understanding the potential of MLLs in School of Foreign Languages in Turkey, by providing a clearer picture of English language teachers' readiness to use them and of teachers' reported current practices with them.

Research Questions

This study aims to address the following research questions:

- 1) What are the attitudes of students, teachers, and administrators towards multimedia language labs in Turkish state university preparatory schools?
- 2) What factors may affect these stakeholders' attitudes towards MLLs?
- 3) How do Turkish university EFL teachers report using MLLs?
- 4) What are the reported reasons for not using MLLs?

Significance of the Study

Technology has an undeniable impact on almost all aspects of language education by providing many opportunities to support language teaching and learning. Similarly, MLLs are supplementary tools teachers may benefit from. However, the integration of MLLs into language teaching depends on many factors which affect the success or the failure of its implementation. Effective integration can be enabled through the understanding of such factors as the ways they can be promoted, the attitudes of students towards MLLs, teachers' openness to the idea of using them, and the support expected from administrators, who are the first step in promoting MLLs. Since there has been little research exploring these factors broadly and the generalizability of much published research on this issue might be problematic because they are all small-scale studies, this study might provide needed empirical results, indicating how MLLs are perceived by both EFL teachers and students and how they are promoted by administrators. Ultimately, it might contribute to English language instruction by revealing both strengths and weaknesses of using MLLs.

At the local level, by offering insights about the use of MLLs and by revealing more about the attitudes of all stakeholders at Turkish state universities,

this study is expected to contribute to language instruction practices in Turkey at the tertiary level. The study may also have beneficial implications for curriculum designers as it may provide information for them about the possible potential benefits or limitations of MLLs. This study may also help the Council of Higher Education in Turkey evaluate how successful and appropriate is the investment they have made in these labs.

Conclusion

In this chapter, the background of the present study, the statement of the problem, the significance of the study, and the research questions have been introduced. The next chapter will review the relevant literature on computer-assisted language learning, the use of MLLs, the advantages and disadvantages of MLLs and studies on the attitudes of students and teachers towards MLLs.

CHAPTER II: LITERATURE REVIEW

Introduction

This research study investigates the attitudes of students, teachers, and administrators towards multimedia language labs (MLLs) and the factors affecting these stakeholders' attitudes towards them. For some years, the world has witnessed the development of technology at a stunning rate. We can see the influence of it in every part of our lives. In the same vein, the rapidly increasing use of computer technology has already been demonstrated to have the potentiality of enhancing language teaching and learning. In these days, the CALL applications such as email, chat, blogs, word processors, corpus use, and language labs are among the main supplements for language teachers.

Although language labs have had a place in use for a better language teaching environment since the late 1960s, thanks to recent developments in technology, language labs have been designed with special software enabling teachers to bring a new and motivating atmosphere to language learning. In several studies, these multimedia language labs (MLLs) have been found to be beneficial, effective, motivating, and facilitating (Kirubahar et al., 2010; Meenakshi, 2013; Patel, 2013; Sarfraz, 2010; Tarasiuk, 2010).

This chapter will first give a general background of CALL, followed by the advantages, and then disadvantages of CALL from the perspective of both students and teachers. Next, the use of traditional language labs will be discussed. Then, the definition, benefits and drawbacks of MLLs will be explained according to the previous studies and reports. Finally, attitudes and perceptions of students and

teachers towards the use of MLLs in English language learning and teaching will be presented.

Differences between Traditional Language Labs and MLLs

Davies et al. (2005) provide a pure definition for multimedia language labs as follows: “A MLL is a network of computers, plus appropriate software, which provides most of the functions of a conventional (analogue) LL together with integration of video, word-processing and other computer applications” (p. 5). Davies et al. (2005) also state that MLLs can be in two types, which are software-only labs or hybrid labs. Software-only labs have no connections between the computers other than a single, standard, network cable. They are lower cost, flexible, and easy-to-maintain. However, Hybrid labs have additional cabling and interface boxes to provide a better voice communication and control signals (See Figure 1). Their additional cabling can restrict space and their cost is higher than software-only systems.



Figure 1 A picture of a MLL

Sanako 1200, installed in each MLL in Turkey can also enable instantaneous voice communication between teacher and learner, and they often have better monitoring facilities and teacher control of student desktops (See Figure 2).

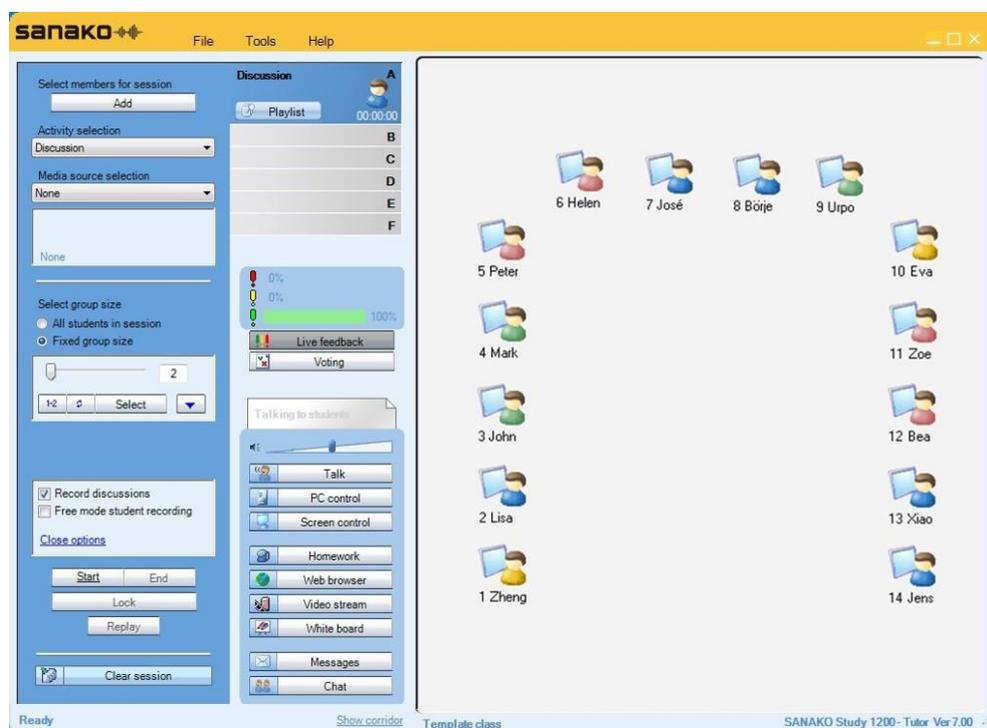


Figure 2 A screenshot of Sanako 1200 software in MLLs.

Teachers can create a virtual classroom through Sanaka 1200, as in Figure 2. They can group students as they wish, no matter where each student sits. Teachers can also utilize the function buttons available in the software (See Figure 3).

There are three main control buttons among all function buttons. They can use ‘talk’ button to talk to the whole classroom, or to an individual student so that no one else can hear them. By using ‘PC control’ button, teachers can shut down or switch on computers, lock screens, mouses, or keyboards, launch a new program in a student’s PC, or block all applications. Finally, the ‘Screen control’ button allows teachers to monitor student PCs. For example, they can scan all of the screens, and monitor them as thumbnails, or they can share a model screen to students.



Figure 3 A screenshot of Sanako 1200 function buttons

In short, these MLLs generally provide versatility, ease of movement between different applications, interactivity, potential for teacher intervention, and potential for independent learning.

Also, the differences between analogue and multimedia language labs help us understand the definition of MLLs. For example, according to Vanderplank (2010), MLLs that enable a teacher to monitor and control student computers in the classroom or even at remote locations have many different functions that do not exist in older analogue language labs. In terms of the functions of a good MLL, Hsu (2010) states that in order to practice listening in a language laboratory, the computer must be equipped with good microphones, headphones, and speakers.

Finally, the problems emerged in traditional computer labs used to enhance language instruction also enable us to differentiate them from MLLs. To give an example of the drawbacks of traditional labs, in a study conducted in a Turkish university, Okan (2008) explores the evaluation of the psychosocial learning environment in computing laboratories. The findings from questionnaires

administered to 152 university students undertaking 1-year compulsory education courses in English reveal that students did not receive enough teacher support, were unable to stay on task long enough to feel involved in the teaching/learning process, and were less cooperative when computers are used. Okan (2008) also states that the teachers are faced with the problem of managing the class in a laboratory that has 25 computers. In light of these issues emerged in Okan (2008), it can be concluded that MLLs are also different in what they require from a teacher.

Technology in the Classroom

The Emergence of CALL

The first computers used for the purpose of language learning appeared in the 1950s and 1960s (Beatty,2010). Those computers were large 1950s mainframes and only available at university campus research facilities. In those years, since the learners had to leave the classroom setting and travel to a computer for studying and the cost of these early machines were relatively high, the time allocated for teaching and learning through computers was not satisfactory at all (Beatty, 2010). The first computer programs for language teaching were first developed at Stanford University, Dartmouth College, and the University of Essex (Blake, 2013). This period also witnessed the revolutionary efforts carried out in at the University of Illinois with the PLATO project (Programmed Logic/Learning for Automated Teaching Operations). The project was a groundbreaking one in that the students were offered an incredible variety of computer language activities including vocabulary, grammar, and translations (Blake, 2013). In the 1970s, the basic interaction required for the implementation of language teaching could be supported by the mainframe computers and their general purpose programming languages (Chapelle, 2001). These mainframe computers continued to be available and used for

CALL research throughout the 1970s and 1980s at university laboratories. During this period, a high-volume storage system, videodisc technology was the main focus of CALL research. This format was initially replaced with Compact Disk Read-Only Memory (CD-ROMs) and then with DVD. Due to various features of this technology, such as its high speed and storage capacity, computers could go beyond behaviorist models of language instruction commonly used on less powerful computers that generally relied upon textual exercises (Beatty, 2010). In parallel with the speed of the developments in technology, in the early 1980s, access to the computers for language teachers could be made available as a result of a drop in prices and the introduction of microcomputers, (Levy, 1997). Additionally, in this period, publishing companies began to invest in language teaching programs, as well, usually delivered on CD-ROMs as a complement in the aim of selling their books (Blake, 2013). In the field of CALL, the earliest language-learning programs were relatively linear, requiring every learner to follow the same pattern in the same way, rewarding the learners for every correct answer and leading them to a more difficult level. At that time, the features of the computer were underestimated in terms of the tasks which were the adaptations of traditional textbook exercises (Beatty, 2010).

Since 1970, CALL materials have undergone a major change from a focus on basic textual gap-filling tasks and simple exercises to interactive multimedia presentations with sound, animation and full-motion video (Beatty, 2010). This transition from simple textual exercises to multimedia began to draw attention of educators (Chapelle, 2001). In the light of these developments, the annual TESOL convention held in 1983 triggered the idea of establishing a professional organization devoted to issues involved in language learning technology. In the following years, several gatherings were organized to discuss and learn about CALL throughout the

world (Chapelle, 2001). In parallel with this academic world, the publishing market was developing at a relatively fast rate.

In 1988, the Computers and Teaching Initiative Centre for modern Languages (CTICML) was established in the UK at the University of Hull, which enabled journals like ReCall, On-CALL, and CÆLL Journal to appear and many books on CALL to be published (Chapelle, 2001)

In the 1990s, in the aim of promoting the development and use of computer-based materials, the UK government launched the Teaching and Learning Technologies Program (TLTP) (Kirkwood & Price, 2005). In the same vein, the Australian government funded a similar program aiming to share software and lessons learned from the development process throughout the higher education community (Kirkwood & Price, 2005). Garret (1991) categorizes this pedagogical software as drills games, simulations, and problem solving.

Since the 1990s, along with these initiations to enhance the CALL environment, the World Wide Web has been used widely in education, which has enabled CALL to be liberated from indoor stand-alone systems to distance language learning platforms in which learners can view or interact with learning content whenever and wherever the internet is connected (Warschauer, 2000). The arrival of the internet has significantly contributed to the boom in educational technology including language instruction as well and rapid growth of online education in recent years (Carnevale, 2004 as cited in Murday et al., 2008). Additionally, with the creation of the World Wide Web and, in relation to that, the abundance of resources on it, language teachers have been able to make effective use of instructional materials, especially in teaching language and culture (Chen, 2008). The internet has also become an important medium that provides the potential for purposeful and

effective use of on-line communication in language and writing classes (Warschauer, 2000) and teachers can both use the internet for finding resources and supply their own materials, knowledge and ideas for other teachers via the internet (Warschauer et al., 2000).

CALL in the twenty-first century has drawn from various developments in technology; in other words, each technological advance has presented new opportunities for the delivery of CALL (Beatty, 2010). To give an example, a large part of the changes that have occurred are grouped under the *Web 2.0*, a platform where a collection of technologies aimed at enhancing creativity and collaboration, particularly through social networking websites such as *Facebook*, *Twitter*, *LinkedIn*, *Instagram*, and *Blogger*, all of which are contact pages serving to give millions of people the opportunity to share content about many things. Undeniably, new computer technologies present several opportunities for CALL practitioners to find innovative ways in the teaching and learning of languages. In order to keep up with these advancement in technology, it is inevitable that teachers will feel obliged to use computers in and outside the classrooms.

Use of CALL in Language Teaching

Chapelle (2010) defines CALL as follows: “The expression ‘computer-assisted language learning’ (CALL) refers to a variety of technology uses for language learning including CD-ROMs containing interactive multimedia and other language exercises, electronic reference materials such as online dictionaries and grammar checkers, and electronic communication in the target language through email, blogs, and wikis” (p.1). CALL was agreed on as an acronym at the 1983 TESOL convention in Toronto (Chapelle, 2001). Warschauer (1996) provides an outline of CALL in terms of its historical development by categorizing CALL into

three different phases: behavioristic CALL, communicative CALL, and integrative CALL. The behavioristic CALL period was put into practice between the 1960s and 1970s, and the CALL activities in this period were based on repeated exposure to the same material and repeated drills. In the second phase, that of communicative CALL, the focus was on the actual use of language through interaction. The last phase of CALL, integrative CALL, has been triggered by two major technological developments: multimedia computers and the internet, both of which provide learners with more authentic materials and activities (Warschauer, 1996). This current phase of CALL has helped the learners become the center of instruction and be more responsible for their learning, which puts a greater emphasis on autonomous learners (Kenning & Kenning, 1983). Thus, being aware of the benefits of CALL for teachers and students is of great importance. Teachers should be judicious in selecting the appropriate CALL materials to address needs, solve problems, and resolve issues related to language instruction. In this section, the related literature will be presented from two perspectives, advantages of CALL for students and then for teachers.

Advantages of CALL for Students

Warschauer and Healey (1998) offer a number of benefits of CALL for students such as multimodal practice with feedback, individualization in a large class, variety in the resources available, exploratory learning with large amounts of language data, and real life skill-building in computer use. They also assert that another benefit of a computer component in language learning is the existence of the fun factor, which is one of the most important elements in motivation for language learning. In addition to these, CALL provides several other advantages for students such as useful information through tasks, potentiality of meeting their needs,

assistance on mechanics in their writings (Ayres, 2002), collaboration (Warschauer & Kern, 2000) and a good simulation of real world (Chun & Plass, 1997).

Additionally, these features of CALL applications lead to a variety of actions and attitudes related to autonomous behavior, such as setting learning objectives, identifying needs, evaluating learning materials and tasks, and reflecting on their own learning process (Arn'o, 2012). The extent to which students can benefit from CALL applications and reach authentic materials and reflect on their learning process can affect their success in language learning.

According to Ayres (2002), students perceive CALL activities as very useful and relevant to their needs. They value the time that they spend for language learning purposes. Although most of the learners do not perceive the use of CALL as a replacement for classroom –based learning, they appreciate it as an important and highly useful aspect of their learning process. Ayres (2002) also states that the use of CALL aids learners in writing, in particularly spelling, and grammar practice. He also concludes that the students would like to use computers in language learning more. Likewise Ayres, Chapelle (2011) also points out that grammar checkers designed to provide an automatic analysis of surface features of a learner's writing and feedback about grammatical and stylistic errors are very useful for students.

Warschauer and Kern, (2000) assert that computers can facilitate collaboration among language learners globally by providing them with a number of opportunities to communicate with each other or with native speakers all around the world through the internet. Also, they suggest that learners can potentially communicate any time from any place. Similarly, Rico and Vinagre, (2000) state that a computer with internet access enables a community of language learners on a virtual platform to exchange information and ideas on certain topics through email or

conferencing facilities, which will help students better relate to life in the information age (Bush, 1997 as cited in Sadeghi & Dousti, 2012)

Thanks to the advancements in computer technology, learners have obtained the opportunity to relate the virtual world to the real world, which makes computer applications more authentic. According to Chun and Plass (1997) learners can probe the simulated environment through multi-model forms both audial and visually, which promotes listening and reading skills. Another skill that CALL applications can facilitate is grammar. In a study conducted by Tongpoon (2001 as cited in Sadeghi & Dousti, 2012), CALL was found to be efficient in improving students' knowledge of phrasal verbs. In the same vein, Arikan (2009) suggests that using authentic materials, providing a number of examples, and demonstrating grammar usage can help students conceptualize grammar learning, which leads to acquisition of grammatical points.

Advantages of CALL for Teachers

Some advantages of CALL for teachers have also been noted in the literature. Although Bush (1997) points out some fears that technology will replace teachers or that instruction will be dehumanized through its use, he asserts the contrary by claiming that technology will not replace teachers, but teachers who use technology will replace teachers who do not. After making this claim, Bush (1997) suggests a number of ways for a teacher to make use of computers such as presenting outlines of the lecture notes using PowerPoint software, and using graphics, digital audio files and digital video clips.

Since extensive language and cultural materials are available through the internet, teachers can structure information-hunting activities through the use of

search engines before the class and even during the class (Chapelle, 2008). Similarly, learners can also make use of search engines and search tools specifically designed for language learning, such as dictionaries, concordancers, and translation tools to look for solutions for their linguistics problems. Chapelle (2008) also suggests that teachers can benefit from computers to explore and select appropriate multimedia and other forms of interactive CALL to provide focused input and interaction according to the learners' level. Similarly, Chen (2008) points out that one advantage of using internet resources is that teachers can easily retrieve the most recent and appropriate information for their students. Teachers can also take advantage of the internet in their classes to motivate students to use English outside the classroom and to make the language a part of their daily lives (Muehleisen, 1997 cited in Shin & Son, 2007).

Moreover, computers can be used to save time by teachers (Chapelle, 2001). To give an example, teachers can be overloaded with too many hours of teaching and student homework. As computers, if used in testing, can do all the evaluation and calculation, teachers can be relieved of this part of their workload, and save time for more teacher-needed activities (Chapelle, 2001). Grammar checkers or spelling checkers can be used for corrections in mechanical tasks, which can also save time for teachers (Chapelle, 2001).

Computers potentially enable teachers to better address students' need for individualization (Bush, 1997). As Sadeghi and Dousti (2012) suggest, based on the idea that repetition, drill, and practice are of great importance for young learners, teachers can take advantage of this feature of computer activities. Moreover, Warschauer and Healey (1998) highlight the benefits of including a computer component in language instruction in terms of individualization. They point out that

especially in large classes, computers can offer the opportunity for pair and small group work on projects (p. 59).

Finally, some researchers approach the use of technology in language teaching from a different perspective and list a number of advantages of CALL for teachers. For instance, Beatty (2010) suggests that there are some authoring packages that provide the presentation of content, leaving the teachers simply to supply the content. He presents an example of what he argues is a particularly convenient tool, *Blackboard Vista*, which provides many types of activities such as email, bulletin boards, chat rooms and quizzes, as well as places for tutorial and lecture notes (p. 197). At this point, Beatty (2010) stresses that one of the great advantages of email, from the teacher's perspective, over some other types of communication is the record of both student's own messages and the messages s/he receives (p. 85). Additionally, the range of tasks and exercises available in CALL can be organized in different ways depending on the focus of the software (e.g., grammar, vocabulary, fluency), targeted language skills (e.g., reading, writing, speaking and listening) or levels of questions and learner's characteristics based on age, gender and level (e.g., beginner, intermediate, advanced) (Beatty, 2010). If a teacher is competent enough in using CALL applications effectively and finds the best for his/her students' needs, s/he can make the teaching more fruitful.

Disadvantages of Using CALL

Although using computers for language teaching and learning has several advantages, there are also some disadvantages that should be considered for an effective implementation of technology. In this section, the disadvantages of using CALL for educational purposes will be discussed.

To begin with, a difficult issue in CALL is the idea that errors in early efforts are not tolerated, which sets computers completely apart from human teachers (Beatty, 2010). Computers do not have the technique to make decisions on what should be ignored and what should be corrected (p.107). Also, most teachers are challenged by time constraints, heavy workloads, and time and effort required for successful integration of CALL into the curriculum (Koehler et al., 2004; Aust et al., 2010). Similarly, Rogers (2010) also underscores five main elements of technology that play a great role in its acceptance and adoption: relative advantage, compatibility, complexity, observability, and trialability.

Additionally, in today's digital era, personal information stored electronically might be stolen and spread around the world in a moment much more easily than in the past, which raises questions about ethical issues (Wang & Heffernan, 2010). Therefore, learners' personal information should be strictly protected both in PC e-learning systems or programs, and in any form of learning within CALL. Similarly, learners themselves might behave unethically rather than third persons, by hacking into a CALL system through security holes to interfere with online test scores or to distort teachers' comments or evaluations, both of which can erode learners' trust in their teachers and lower their motivation towards CALL instruction (Wang & Heffernan, 2010).

Last but not least, teachers' previous computer experience can affect teachers' perceived relevance of technology; in other words, negative attitudes towards computer use result in decrease in confidence and increase in anxiety (Chen, 2008). In the same vein, Koehler and Mishra (2009) state that many teachers graduated from university at a time when educational technology was rather different than it is today and claim that teachers generally have inadequate experience with

dealing with digital technology for educational purposes. Thus, most teachers normally consider themselves not competent enough to use technology in the classroom and often do not appreciate its value in language instruction (Koehler & Mishra, 2009). In parallel with Koehler and Mishra, Arn'o (2012) asserts that one of the concerns for language teachers is to keep pace with students' technological skills. There is a generation gap in terms of technology between the young people of today; in other words, digital natives, people who are born into the technology era, and many of their elders; in other words, digital immigrants, people who are newcomers to the latest technology (Prensky, 2001). However, eight years later, Prensky has brought a new term to the literature, that is, digital wisdom (Prensky, 2009). To explain the term, Prensky (2009) gives the example of leaders and journalists who are digitally wise when they make use of participative technologies for polling, blogs, and wikis. Digital wisdom can be taught; however, the unenhanced brain is well on its way to becoming insufficient for truly wise decision making (Prensky, 2009). In parallel with the technological advancements, both teachers and students are challenged by new roles when technology is integrated in the class (Bañados, 2006).

Use of Traditional Language Labs

Salaberry (2001) reports that the money used to purchase language labs in the 1960s was seen as a waste of money by some researchers. However, many others attempted to counteract this idea and published results of their studies that indicated laboratory groups outperformed non-laboratory groups. Salaberry (2001) reports on many studies arguing that language laboratories, if well used, can drill the students on oral aspects and provide stimuli. However, he points out that in those years many teachers were discouraged with the use of language laboratories because of several

reasons: poorly produced commercial tapes, insufficient efforts to make structural drills meaningful, selection of unattractive materials, lack of programs for advanced learners, and little faculty involvement (Holmes, 1980 cited in Salaberry, 2001).

In addition to the fact that the lab was seen as a kind of tireless teacher's aid that could handle the mechanical aspects of language, sparing time for the teacher for more creative activities (Underwood, 1984, p. 34), actually these audio-tape based language laboratories were initially considered a solution to the problem of teaching language to a large number of students in a short time. The use of audio recording was, of course, the great promise of the language labs of the 1960s and for the teaching machines of the late 1960s, it was confidently claimed that students could learn twice as much in the same time and with the same effort as in a standard classroom (Donaldson & Haggstrom, 2006, p.251).

On the other hand, due to the fact that language teachers did not know how to design and implement appealing tasks especially for the lab session, "students were developing a strong distaste for language labs, a distaste that unfortunately carried over to language learning in general" (Underwood, 1984, p.35). Also, many teachers considered the lab as a substitute for teaching; therefore, the lab started to be seen as the center of language teaching and the teacher as the person helping the lab operation. Therefore, by the end of the 1970s, the laboratory gradually lost its favor among teachers and students because of the lack of imagination in creating activities other than repetitive drills and inadequate proper training for teachers. In the mid-1980s, the language laboratory was given another chance to be reshaped through user-friendly controls, imaginative materials using cognitive approach, and improved laboratory design.

Ways of Using Traditional Language Labs in Classes

Rivers (1970) points out six aspects regarding the use of the language lab in teaching language: (1) each student may have the opportunity to hear native speech clearly and distinctly for the first time in the history of foreign-language teaching; (2) the students may hear this authentic native speech as frequently as their teacher wants; (3) the taped lesson provides an unchanging model of native speech for the student to imitate; (4) in the language laboratory the student may listen to a great variety of foreign voices; (5) each student may hear and use the foreign language throughout the laboratory session, instead of wasting time waiting for his turn in a large group, as he does in the usual classroom situation; and (6) the laboratory frees teachers from certain problems of class directions and classroom management, enabling them to concentrate on the problems of individual students (p. 321).

Lavine (1992) asserts that at the end of the 1980s and the first years of the 1990s, to facilitate the lab sessions, the students were required to buy a packet including all the materials and necessary information about the use of lab/computer. Students used to do same activities focusing on the same linguistics area in all levels.

A sample structure of the lab tasks in those years is as follows: Students were required to prepare homework (generally includes writing) that they would bring to the lab. In the lab, depending on the activity, students were required to listen to a tape or watch a video, after which they would record themselves and exchange it with their peers. Then, after listening to their peer's video or tape, they were required to carry out activities that their teachers had prepared beforehand. Through these kinds of tasks and by focusing on four skills and different learner styles, the attitudes towards the lab sessions could be improved. Communicative lab activities had the potential to foster positive opinions about the value of the labs and its role in the curriculum (Lavine, 1992).

Use of Multimedia Language Labs

Lotherington and Jenson (2011) state that, though long considered a “pedagogical dinosaur”, the language lab is the ancestor of technologically mediated L2 learning. Some negative experiences with language labs have been reported by Çelik (2012). These negative attitudes lead teachers to be skeptical of new technologies in the classroom. Due to a significant generation gap between teachers and students, reluctance on the part of instructors may be caused by lack of understanding and even fear of technology (Çelik, 2012).

In an on-line questionnaire survey by Toner et al. (2008), teachers in the UK were asked whether their institution had MLLs and /or analogue language labs (LLs). They were also asked about their views on CALL and the effectiveness of MLLs. According to the survey, over 70% of the UK institutions surveyed had at least one MLL. However, the study revealed under-utilization of existing MLLs, with, in some cases, MLLs being used simply as ordinary classrooms, not to their full potential at all. The authors also signal a danger that MLLs are being used just for easy-to-carry-out tasks and that, as a result, their functionality is under-exploited.

Garrett (2009) revisits, as she calls, the current trends of technology by revising her 1991 article. She states that the growth of consumer technologies has encouraged a great deal of CALL development, along with its negative impacts. She points out that administrators tend not to realize the difference between technology use for the purpose of language learning and general consumer use. Garrett (2009) also asserts that the nature of language media technology centers have been altered to general-purpose computer labs and the support staff know little about the specific ways in which language teachers use technology.

As Vanderplank (2010) points out it can be inferred from many findings that it looks as if MLLs are being set up to fail in many institutions just as analogue LLs were in the past. He also states that regarding MLLs, the fulfilment of their promise is still a long way off and there is clearly a great deal to be done regarding integration and training (Vanderplank, 2010).

Benefits of MLLs

Benefits of MLLs for Students

The modern language laboratory designed with the latest technology is arguably an ideal communication tool for language learning due to its facilities that can help a student learn a language with proficiency to communicate. When we analyze the current studies conducted on MLLs, they provide us with a clearer picture about what is going on in these labs.

First of all, a number of research studies show that these labs are effective in teaching various skills (Haider & Chowdhury, 2012; Pasupathi, 2013; Patel, 2013; Sadeghi & Dousti, 2012; Satish, 2011). To begin with, Sadeghi and Dousti (2012) states that the performance of students participating in a computer lab study on grammar indicates that the computer lab is a helpful device and more effective in learning grammatical structures. In another study, conducted by Pasupathi (2013) to analyze the effect of technology-based intervention in language laboratory to improve the listening skills of first year engineering students, it is reported that the use of technology in a language laboratory for training students in listening competences reduced the anxiety of the students in the process of listening and that a significant improvement on the part of students in acquiring listening skills through technology-based intervention was observed. Technology-based intervention also helped the students increase their confidence in using such skills as understanding

gist, background information, main ideas, and specific information (Pasupathi, 2013). The researcher also includes the view of the student views about the MLLs. He reports that the students appreciated web resources for improving listening skills in the language laboratory and that they felt technology-based learning was less time consuming. Pasupathi (2013) concludes that technology-based intervention, especially in a language lab, will help students to overcome their fear and anxiety of listening in English.

In another recent study, Patel (2013) lists a number of advantages of MLLs on the part of students. Firstly, the researcher notes that MLLs play a significant role to enhance the communication skills of engineering students and the hardware used in the lab stimulates the eyes and ears of the learner to acquire the language quickly and easily. Patel (2013) points out that the MLLs help to avoid the monotony of theory classes; develop phonetic and spoken English skills with RP (Received Pronunciation) among the students; and enable the students' spoken skills with proper stress and intonation. Patel (2013) concludes that these laboratories are designed to assist learners in the acquisition and maintenance of aural comprehension and oral written proficiency. The effectiveness of MLLs on communication skills of students has also been examined by Haider and Chowdhury (2012). In the study, they examined how to promote Communicative Language Teaching (CLT) within a CALL environment and in their findings, the students' views were included. Based on these views, the authors elicit that the MLLs and CLT integration help the students improve their fluency and overcome their shyness thanks to the confidence increased by using the technology (Haider & Chowdhury, 2012).

Vocabulary teaching can also be implemented through MLLs. To illustrate, Satish, (2011) attempts to highlight the efficacy of teaching of vocabulary in the

language laboratory to secondary school students. The researcher tried to shed light on the importance of MLLs by ascertaining the difference between MLL method and the traditional method used in teaching of vocabulary building English and to compare the vocabulary acquisition of the students taught through these two methods. Satish (2011) notes that learning vocabulary in English in the MLLs gives encouraging results and the students who received the instruction in the MLL clearly outperformed the traditional instruction students.

In addition to contributions to the skills, MLLs have been reported to help students to be independent learners (Tarasiuk, 2010; Wagener, 2006) and to provide better visualization potential (Huang & Liu 2000). First of all, the effective use of MLLs is argued to lead to greater independence in learning. Tarasiuk (2010) notes that normally he would model annotating for his students, highlighting the places to mark important passages, character descriptions, major events, and plot twists in the traditional instruction setting. However, he reports that in the MLL the students can manage these tasks on their own as they are aware of the moments that they need to go back into their novels to add information (Tarasiuk, 2010). Secondly, in a study conducted to explore how to promote independent learning skills using video in MLLs, Wagener (2006) appreciates the instruction in MLLs by stating that the lack of ‘teacher’ feedback facilitates independent learning whereby students are obliged to focus on the actual work undertaken and its accuracy rather than on a mark and the lecturer’s opinion. Wagener (2006) also suggests that such reflection should promote a greater awareness of students’ personal weaknesses and the type of mistakes they are making and how to avoid them. Finally, since the traditional classroom has far less potential to provide any similarities to the real life situation, the students are often required to rely on their imaginations to place themselves in that situation.

MLLs on the other hand offer a chance for students to actually visualize the situation. The computer software has the capability to create a virtual world that is very similar to the real world, which ultimately increases the authenticity of the tasks that are being carried out in the labs by the students themselves (Huang & Liu, 2000).

All in all, the aforementioned studies reveal that MLLs, if used to their full potential, can provide teachers with a great deal of opportunity to make their lessons more fun, authentic, and fruitful.

Benefits of MLLs for Teachers

In addition to the advantages for language learners, MLLs provide language teachers with a number of benefits such as improving language instruction (Mahdi & Al-Dera, 2013; Kelly, 2009), convenience for teaching large number of learners (Meenakshi, 2013), teaching communicative skills in a better way (Haider & Chowdhury, 2012; Meenakshi 2013), and observing the students learning directly (Tarasiuk,2010).

First of all, teachers can achieve effective instruction if they are able to establish a balance between teacher time and computer time, teacher role and computer role (Mahdi & Al-Dera, 2013). Also, if how the teachers plan to use software programs to support their teaching in a MLL is determined considering the specific number of hours that the students will spend in the MLL, they can prevent classroom control and time management problems beforehand (Mahdi & Al-Dera, 2013). Secondly, Kelly (2009) points out that the instructor's digital personality can affect student achievement, retention and satisfaction with technology and he encourages teachers to internalize technology-based instruction. Thirdly, MLLs can potentially be used for teaching communicative English if, particularly, teachers who integrate MLLs into their instruction are skilled in operating the language labs and

have a thorough command over the multimedia based materials (Haider & Chowdhury, 2012). In the same vein, Meenakshi, (2013) notes in his study, in which the impact of language labs on developing various linguistic skills like intonation were explored, that teaching English pronunciation through language laboratory leads to higher performance for the students. The author states that although pronunciation is taught in the schools, the results of this study reveal that training in MLLs leads to far better performance of students as compared to traditional teaching (Meenakshi, 2013). Finally, MLLs give the teachers the opportunity to track the students' movements in a task. Tarasiuk (2010) states that thanks to the facilities that computers provide, the teacher can observe the students' learning directly through the "comprehension moves" they make as they edit their wikis and create their digital book talks, which enables the teacher to be aware of the pace of the students, their progress on tasks, and give immediate feedback if needed.

As the aforementioned studies suggest, when teachers are aware of the potential of a MLL and how to integrate it into their instruction, there is the potential for this practice to have a great contribution to language teaching.

Attitudes of Students and Teachers towards the Use of MLLs

"They also think that their positive attitude and continuous attempt to introduce new technologies and teaching materials to the class will improve language instruction" (Mahdi & Al-Dera, 2013, p.59). This statement is actually a good summary of the relationship between the attitudes of both students and teachers towards the use of MLLs and the success in language learning and teaching that come from this successful combination. In this section, first the attitudes of students towards the use of MLLs will be discussed with the sample studies from the

literature and then the attitudes of teachers towards the use of MLLs will be examined.

First of all, Salcedo (2010) compared beginning level Spanish courses taught via conventional instruction and the same class taught exclusively in the MLL. In the study, the researcher also compared the assessment scores for quizzes, tests, oral interviews, final exam grades and student opinions. Salcedo's (2009) findings indicate the classroom group performed significantly better than the lab group in the first term, yet the following semester showed the lab group performing better. According to the author, students from the two semesters taught in the lab think that the lab was a great help with the activities as well as the tests, and they also indicated that they liked working on the computers.

Contrary to the study by Salcedo (2010), Sarfraz (2010) notes quite different findings in terms of the attitudes of students towards technology, in particular, MLLs. The perceptions of freshmen, who had never taken a formal language class in a MLL were investigated in the study. Sarfraz (2010) reports in the results that the subjects were more or less positive to the technology enhanced environment of the MLL. The researcher states that the study focusing on the students' first reactions to computer usage in a language lab provides adequate evidence to indicate that MLLs can be very effective as supplement to the foreign language teaching to facilitate communication skills (Sarfraz, 2010). Most importantly, this study is of importance in that it shows that the language learning ability of the students underwent a positive change in the setting of the MLL, suggesting that language teaching in a setting different than the conventional classroom can be a promising trend with positive educational potential (Sarfraz, 2010). Also, these statements from Tarasiuk (2010) indicate how the students are happy with studying in the lab: "It looks and sounds

like the students are playing at the computers in the lab when they laugh and highfive each other for a job well done.”

If the literature is reviewed from the perspective of teachers, a number of studies reporting on both positive and negative attitudes towards the use of MLLs can be revealed. For instance, Chapelle (2001) states that in her department, many of the instructors and teaching assistants who teach writing classes are assigned to computer labs to teach. However, she points out that these teachers are there simply because they are told and that these teachers do not see the computer as under *their* intention and accountability (p. 74). Another study conducted to find out the impact of teachers' age, experience and gender on technology use in language teaching and learning contributes a lot to our understanding of these factors (Mahdi & Al-Dera, 2013). The researchers first inform us about the age factor in the use of technology. They report that the results obtained from the interview show that most of the teachers felt that the age of the teacher does not play any role on the integration of ICT in language teaching. However, these findings contradict some previous studies relating the effect of teachers' age on technology use in language teaching (e.g., Teo, 2008; Yaghi, 2001). Those studies found that older teachers tend to be less confident with using computers. Mahdi and Al-Dera (2013) also state that there is no difference between expert and novice teachers, or less experienced and experienced teachers, in terms of the use of ICT. Again their results are in contrast with the findings of some previous studies. For example, Meskil et al. (2002) states that novice teachers are not as comfortable as expert teachers in using computers and implanting technology in their classrooms. Finally, in terms of gender, Mahdi and Al-Dera (2013) found a significant difference between male and female teachers in the use of ICT in language teaching and learning activities. In their situation, female

teachers did not make use of ICT practices in language instruction at the desired level.

Conclusion

This chapter presented relevant literature on CALL and MLLs in particular. The use of LLs for educational purposes has a long history. A lot of discussions have been made on the advantages and disadvantages of LLs in general and MLLs in particular. The benefits of MLLs from the perspective of students and teachers have been presented. Since the technology is not a stable field, it brings innovations with both advantages and disadvantages. Therefore, up-to-date elements that technology contributes to specifically language teaching should be researched and discussed in detail.

CHAPTER III: METHODOLOGY

Introduction

This study was conducted in order to investigate the attitudes of students, teachers, and administrators in Turkish state universities towards multimedia language labs (MLLs) and the factors affecting these stakeholders' attitudes towards them. The study particularly explored how MLLs are perceived by EFL teachers and students and how they utilize this technology. The study also aimed to find out administrators' perceptions of MLLs and the underlying reasons of teachers for deciding not to use MLLs in their institutions.

The study addressed the following questions:

- 1) What are the attitudes of students, teachers, and administrators towards multimedia language labs in Turkish state university preparatory schools?
- 2) What factors may affect these stakeholders' attitudes towards MLLs?
- 3) How do Turkish university EFL teachers report using multimedia language labs?
- 4) What are the reported reasons for not using MLLs?

This chapter presents the participants and settings of the study, the data collection instruments, the data collection procedures, and data analysis

Participants and Settings

This study was conducted in 16 different state universities where MLLs are used throughout Turkey. These 16 institutions are in five different regions of Turkey - one university in the Aegean region, two in Marmara, three in the Mediterranean, six in Central Anatolia, and four in the Black Sea region. All of the students who were surveyed in the study were students of preparatory schools in these universities, at different proficiency levels. In any one institution, not all classes using MLLs for language teaching purposes were necessarily surveyed. If there were more than one class where MLLs were integrated into the weekly schedule in any institution, the class in which the MLL had been used most often or for the longest time was surveyed. If the students from different classes had the same degree of MLL experience, one sample class was chosen at random (See Table 1).

The instructors from these 16 different state universities were also involved in the study. Among all instructors in any institution, only the ones with actual experience using MLLs were surveyed. Finally, five administrators were interviewed to reveal their attitudes towards the use of MLLs. The administrators were chosen from each of the represented five different regions of Turkey in order to demonstrate an equal distribution. For those regions in which there was more than one participating university, the university that had the most MLL experience was chosen. If the time of MLL use was the same, one sample was chosen at random (See Table 1).

Table 1

Participants of the study

Region	Number of Institutions	Number of Students	Number of Teachers
Aegean	1*	65	7
Black Sea	1	13	2
	2*	49	6
	3	16	3
	4	46	4
Central Anatolia	1*	45	5
	2	25	6
	3	27	2
	4	13	1
	5	48	5
	6	34	3
Marmara	1*	50	6
	2	22	3
Mediterranean	1	30	3
	2	14	3
	3*	13	2
TOTAL		510	61

* The administrators in these universities were interviewed.

Instruments

Emails

In order to reveal the reasons for not using MLLs, the researcher sent an email to the instructors and assistant directors, requesting information about the use of MLLs in their institutions. Also, if they were not using MLLs, the reasons were requested as well. By the end of January, 45 institutions had replied to the email; 29 of them stated the reasons for not using MLLs actively in their institutions and 16 of them reported that they were using them and consented to take part in this study.

After finishing the initial searching step, the researcher made a list of the 16 institutions where MLLs are used.

Questionnaires

In order to collect data, survey techniques and instruments were employed in this study. Two different questionnaires were administered in this study in the aim of collecting data about students' and teachers' attitudes towards MLLs at Turkish state universities. Both the students and teacher questionnaires included five-point Likert-scale questions, with responses ranging from "Strongly Agree" (5) to "Strongly Disagree"(1), as well as open ended and multiple choice items. A consent form was signed by all of the participants (see Appendix A). The student questionnaire explored their attitudes towards MLLs in language learning (see Appendix B). The first part of the student questionnaire aimed to collect data about the students' backgrounds. In the second part, the students were expected to answer 21 items about their attitudes towards MLLs in language learning. Similarly, the teacher questionnaire elicited information about EFL teachers' attitudes towards MLLs in language instruction (see Appendix C). In the first part of the teacher questionnaire, some background information was requested. The second part of the questionnaire consisted of 27 items eliciting information about the teachers' attitudes towards MLLs and their general use in English language instruction.

While writing the questionnaires, the researcher was inspired by Elaziz's (2008) questionnaire on attitudes of students and teachers towards the use of interactive whiteboards in EFL classrooms. Also, in order to select appropriate items for both questionnaires, the literature on CALL and some researchers' opinions on teacher's and student's role in CALL were reviewed (Beatty, 2003; Chappelle, 2001). Finally, the researcher's own observation and experience contributed to the

development of the questionnaires in two ways. First, the researcher was one of the teachers selected as responsible for MLLs and for training sessions about the use of MLLs at Hacettepe University in 2011. Therefore, the researcher was able to draw on this experience in revising questions and creating new ones. Second, the initial data collected by emails from institutions about the use of MLLs helped the researcher in writing the items.

After the finishing of the final version of the student's questionnaire in English, the items in the student's questionnaire were translated into Turkish by the researcher. A back-translation procedure was also provided by three fellow English teachers from Düzce University. The translators were not given the original version of the questionnaire. All of three versions, the original, translated and back-translated, were compared in order to eliminate any differences and vague statements. All of the three teachers have master degrees in English language teaching. These academicians have all been employed in the Preparatory School at Düzce University for at least four years. With the help of teachers' opinions, content and face validity were assured.

A pilot study was conducted in the Department of Foreign Languages at Gazi University in order to improve both questionnaires. Twenty-five students and two teachers participated in the pilot study, which was conducted in the preparatory school at Gazi University. Taking into consideration that they had some experience in using MLLs, a preparatory class was chosen at random. Two teachers who had used MLLs for some time were selected for the piloting. The researcher distributed the student questionnaires to students in the preparatory class and the teacher questionnaire to the two teachers with MLL experience. It was requested from both the students and the teachers to point out any vague items and to give their opinions

about the survey in general. After the piloting, thanks to the teachers' feedback, items 23, 24, and 25, all of which were about the problems in MLLs, were added to the teacher questionnaire.

Interviews

Finally, an interview protocol was used (see Appendix D) with the aim of investigating administrators' attitudes towards the use of MLLs. These interviews were conducted with the directors of the Department of Foreign Languages in five different universities in which MLLs are installed. Including administrators in this study is important because they are the decision-makers, who might or might not promote the use of MLLs in these settings and encourage teachers to use them. During the interviews, the researcher asked six questions in total, eliciting general background information about the institution, the factors affecting their institutions' decision to promote the use of MLLs, their views on the benefits of MLLs, and the most common problems expressed by the EFL teachers. All five interviews were held in Turkish and recorded by using a voice recorder. Afterwards, those speeches were transcribed and translated into English by the researcher. A sample page of transcription and translation are included in Appendix E and Appendix F. The transcriptions of the five interviews were analyzed in terms of positive or negative attitudes towards the integration of MLLs in English language education.

Procedure

In January 2014, an email was sent to the Council of Higher Education (CoHE) in Turkey requesting the contact names of the teachers who are responsible for MLLs in their institutions and who attended the training sessions at Hacettepe University in 2011. Thanks to the document provided by the CoHE, it was learned that approximately 100 state universities possess MLLs and the names of two

teachers in each institution were provided. Since three years had passed since that training, it was possible that those instructors could have moved to other institutions within this time. In order to explore whether those instructors were still in the same institutions, the researcher checked each name on the university websites. During this confirmation process, if an instructor's name could not be found on the website, the name and email address of the assistant director from the same institution were noted. After confirmation and obtaining the contact information, the researcher sent emails to the instructors and assistant directors.

After the pilot study, the researcher distributed the questionnaires to two of the institutions in Ankara and sent the other two of them to the institutions by post. The rest of them were surveyed through Google Forms online questionnaire. Then, the interviews were held with the directors of five institutions in the second week of April 2014. In order to find out their attitudes towards MLLs, six questions were asked to them.

Data Analysis

The researcher analyzed all items, except for the open-ended questions at the end of both the students' and teachers' questionnaires, using The Statistical Packages for Social Sciences (SPSS) Version 20. The open-ended responses from both the students and teachers were categorized based on the sections in the analysis of the questionnaire data. A categorization was also made in terms of positive and negative opinions in order to analyze the responses of the questions asked to the administrators. Frequencies and percentages were calculated for each item that was statistically analyzed. One-way ANOVA tests were employed in the aim of exploring the relation between variables such as age, experience with/exposure to MLLs, the software used in MLLs and students' and teachers' having negative or positive

attitudes towards MLLs. Interviews with the administrators were recorded and then transcribed by the researcher. After the transcription process of the interviews, the data were categorized in terms of positive and negative attitudes of administrators towards the use of MLLs for English language instruction.

Conclusion

In this chapter, the general information regarding the purpose of the study, the research questions addressed, the participants, the instruments, the procedure and the data analysis was provided. The data analysis and the findings will be discussed in detail in the next chapter.

CHAPTER IV: DATA ANALYSIS

Introduction

This study explored the attitudes of students and teachers towards the use of multimedia language labs (MLLs) in language classrooms. Forty-five state universities were investigated in order to elicit the use of MLLs. Twenty-nine of them reported that they were not using the MLLs, so students and teachers at the remaining 16 institutions, where MLLs were being used, were surveyed. All of the universities where the questionnaires were administered were state institutions. Finally, interviews, which were conducted to explore the attitudes of administrators, were held at five different universities where MLLs were being used.

The study aimed to provide a snapshot of the use of MLLs in Turkish state universities. The questionnaires were administered to elicit the attitudes of the students and teachers towards the use of MLLs in English classes. Similarly, the interviews conducted with the administrators provided information about how the directors of Schools of Foreign Languages perceive MLLs and how they promote the use of this technology.

The study addressed the following questions:

- 1) What are the attitudes of students, teachers, and administrators towards multimedia language labs in Turkish state university preparatory schools?
- 2) What factors may affect these stakeholders' attitudes towards MLLs?
- 3) How do Turkish university EFL teachers report using MLLs?
- 4) What are the reported reasons for not using MLLs?

Data Analysis Procedure

With the exception of section three, in which two open-ended responses were required, all the sections in the student questionnaire were analyzed statistically. In the teacher questionnaire, with the exception of one question (Q9) in section one, two questions (Q25 and Q27) in section two, and all questions in section three, all sections were analyzed statistically. The Statistical Packages for Social Sciences (SPSS) Version 20 was used to compute frequencies and percentages of each Likert-scale question. All the Likert-scale items consisted of a 5-point format: strongly agree, agree, no idea, disagree, and strongly disagree. Also, one-way ANOVA tests were calculated in order to see whether there was a significant difference between attitudes and various participant factors such as age, teaching experience, lab hours, and type of software used in MLLs. Moreover, responses from the two open-ended questions of section three in both questionnaires and the open ended questions (Q9, Q25, and Q27) in section two of the teacher questionnaire were grouped according to the similar questions in the second section of the questionnaires and were discussed after each statistical analysis. The transcript data obtained from the interviews were analyzed according to the responses of the interviewees for each of the six questions. All the responses for each question were examined in the aim of eliciting similarities and differences between the attitudes of the administrators. Finally, the data obtained from the emails received from 29 different universities were categorized in order to elicit the common and different reasons for not using MLLs.

The rest of the chapter is devoted to four different parts based on the results obtained from the analysis of the questionnaires, interviews, and emails. In the first part, the analysis of questions in the student questionnaire is presented in seven sections: issues related to learning, technical issues, affective factors, motivational

issues, time management/organizational issues, differences between traditional class teaching and MLLs, and factors that affect student attitudes. In the second part, the analysis of the questions in the teacher questionnaire is introduced based on seven sections: attitudes related to teaching, general attitudes, motivational issues, training, the Council of Higher Education (CoHE), general use of MLLs, and factors that affect teacher attitudes. In the third part, the data obtained from the interviews are presented based on the six questions asked, and the similarities and differences between the interviewees' responses for each question addressing attitudes towards the use of MLLs are analyzed. In the final part, the data gathered from emails are presented based on the similarities and differences of the reasons for not using MLLs stated by the contact person in each state university.

Part 1: Students' Attitudes towards the Use of MLLs

Section 1: Students' Attitudes Related to Learning

The questions (Q1, Q2, Q4, Q5, and Q14) in this section of the questionnaire aimed to explore students' attitudes towards the use of MLLs in terms of their effect on learning. In this section, the analysis of the responses to five questions in total are presented. For all of the questions, the students could show their degree of agreement or disagreement by choosing options from 1 (strongly disagree) to 5 (strongly agree). The first question was asked to find out whether the students thought that they learn more when they are taught in MLLs. The second question aimed to reveal whether lessons in MLLs are easier to understand. Q4 aimed to find out whether the audio and visual facilities of MLLs make their learning easier. Q5 elicited whether MLLs have the potential of providing a wider range of sources for students. Finally, the last question in this section (Q14) revealed whether MLLs make learning more enjoyable and interesting. The results for these questions can be found in Table 2 below.

Table 2

Students' attitudes towards MLLs and learning

		SD	D	NI	A	SA	Mean
Q1	f	11	24	38	259	178	4.12
	%	2.2	4.7	7.5	50.8	34.9	
Q2	f	9	26	35	277	163	4.10
	%	1.8	5.1	6.9	54.3	32.0	
Q4	f	9	23	34	269	175	4.13
	%	1.8	4.5	6.7	52.7	34.3	
Q5	f	6	34	29	277	164	4.10
	%	1.2	6.7	5.7	54.3	32.2	
Q14	f	10	32	38	266	164	4.06
	%	2.0	6.3	7.5	52.2	32.2	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q1: I learn more when we study in MLLs.

Q2: It is easier to understand the lesson when we study in MLLs.

Q4: Audio and visual materials we use in MLLs helps me understand the lesson better.

Q5: I find the opportunity to learn from different sources with the help of MLLs.

Q14: MLLs make learning more interesting and exciting.

As the mean scores clearly indicate, the students generally agreed with all of the statements in this section. By considering the highest mean score (Q4), we can understand that most of the students believe that their learning is promoted by the audio and visual materials available in MLLs. Teachers can easily show visual materials through the software installed in these computers and students can benefit from high-tech microphones and headphones for audio materials. The mean scores of Q2 and Q5 (M=4.10) show that Four fifths of the students believe that MLLs provide

a great variety of sources and that MLLs have the potential of making lessons more interesting and exciting. A similarly large majority (86%) think that studying in MLLs helps them learn more.

Regarding the open-ended responses given, 18 comments have relevance for the questions in this section. These comments were categorized into positive ones (12) and negative ones (6). In terms of positive opinions, half (6) of the participants stated that the lessons in MLLs are relatively productive, enjoyable, and useful, writing similar statements as follows:

MLLs make lessons enjoyable and comprehensible. It also increases our passion of learning a foreign language (Student 43).

Six of the 12 comments were about audio and visual materials that they use in MLLs. They underlined that instead of studying grammar, they prefer activities that can improve their listening skills. They also stated that they would like to use the microphones and headphones more often. In parallel with these opinions, two students mentioned that since MLLs can enable them to reach any sources very fast, the lessons should be organized accordingly. Also one student complained about the obligation of buying a course book and suggested that generally they could use the MLLs more often for language teaching and learning purposes.

In terms of negative opinions, six of the respondents pointed out that MLLs make their learning more difficult in some ways. For example, nine of them wrote that they need more explicit teaching, especially for grammar lessons. They want to be taught grammar points explicitly in a teacher-centered classroom environment. Interestingly, one of the respondents complained about the lack of enough online homework. He thinks that his teacher should assign online homework more often.

Section 2: Students' Attitudes Related to Technical Issues

Two questionnaire items aimed to explore the students' attitudes towards MLLs in terms of technical issues (see Table 3). This first question was asked to explore whether some technical breakdowns (such as broken headphones and microphones) hinder their motivation in the MLLs. The second question aimed to explore the frequency of technical breakdowns.

Table 3

Students' attitudes related to technical issues

		SD	D	NI	A	SA	Mean
Q6	f	61	154	83	128	84	3.04
	%	12.0	30.2	16.3	25.1	16.5	
Q7	f	168	230	49	36	27	2.07
	%	32.9	45.1	9.6	7.1	5.3	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q6: Technical problems (broken headphones and microphones) which I encounter in the MLL decrease my motivation.

Q7: Computers in the MLLs often break down.

When we look at the results of the sixth item, it is seen that the respondents' opinions about the broken headphones and microphones are mixed. As shown in Table 3, there is an equal distribution in terms of agreeing and disagreeing with the sixth item, with 42 % of the students either disagreeing or strongly disagreeing that technical breakdowns in the MLLs constitute a problem for them and the same percentage of students agreeing that these breakdowns decrease their motivation. For the same item, 16% of the students reported having no idea about this issue. These very mixed results on this question might be due to the frequency of breakdowns.

Since there are not a lot of breakdowns reported (see next question below), the students might have been confused in responding to this item.

As for the seventh item, a large majority of the respondents do not think that the frequency of the breakdowns in MLLs is high. Only 12 % stated that computers often break down, which is very close to the percentage of the respondents who reported having no idea. This suggests that while there are some breakdowns in the MLLs, either they do not cause a problem for the students, or these breakdowns are solved in a short time.

In the open-ended response section, six out of all 48 comments revealed that the computers in MLLs do not read their hard drive. Three of them stated that their teachers are good at computers and capable of solving the possible problems in the MLLs, although some of the teachers have problems with fixing the technical problems that occur during the lessons, which makes students think that their learning is interrupted. Also, four students complained that they could not turn on their computers before their teacher turned on his/her computer because the system in the MLLs does not allow them to do so.

Section 3: Students' Attitudes Related to Affective Factors

There are four items in the questionnaire related to the students' feelings about the use of MLLs (see Table 4). The first question directly addressed whether they like using the computers in the MLLs (Q8). The second item aimed to explore the difficulty of using the computers in the MLLs (Q9). The next item investigated the students' preference between classroom teaching and MLL teaching (10), and the last item was directed at finding out whether they were comfortable with their works being shown to their classmates through the software in the MLLs (Q11).

Table 4

Students' attitudes related to affective factors

		SD	D	NI	A	SA	Mean
Q8	f	7	32	37	267	167	4.09
	%	1.4	6.3	7.3	52.4	32.7	
Q9	f	147	191	43	90	39	2.38
	%	28.8	37.5	8.4	17.6	7.6	
Q10	f	14	36	62	250	148	3.95
	%	2.7	7.1	12.2	49.0	29.0	
Q11	f	59	141	67	167	76	3.12
	%	11.6	27.6	13.1	32.7	14.9	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q8: I like using the computers in MLLs.

Q9: It seems difficult for me to use the computers in MLLs.

Q10: I prefer lessons that are taught in MLLs.

Q11: It makes me uncomfortable when my work is shown to the whole class with the system in the MLLs

As can be seen in Table 4, a large majority (85%) of the respondents report liking to use the computers in MLLs whereas only a small group (8%) stated otherwise. Q9 was a negative statement and has the lowest mean score (M=2.38), meaning that the students either disagreed or strongly disagreed with the idea that using computers in MLLs is difficult. The second highest mean score (M=3.95) reveals that the students' general preference is for lessons that are taught in the MLLs rather than in class. Although the eleventh item is another negative statement, its mean score (M=3.12) is not as low as that of Q9, revealing that the respondents are mixed in their feelings about teachers showing students' works to the whole class. In the open-ended section, nine students commented on whole class feedback

on their works. They reported that in writing class their teacher usually showed their essays on their classmates' screens and gave feedback by addressing their mistakes, which they felt uncomfortable with. On the other hand, another four students stated that seeing their friends' works and how their teacher corrected the mistakes was rather beneficial for them. Similarly, 18 of all the respondents wrote that thanks to the software installed in the MLLs, they all felt like they were involved in the process of learning interactively, which is something they said they did not feel in the classroom.

Section 4: Students' Attitudes Related to Motivational Issues

In the questionnaire, there are four questions aimed at exploring students' attitudes towards MLLs in terms of motivational issues (see Table 5). The first question in this section investigates students' overall idea about their concentration level in the MLLs. The second question explores whether the students feel they participate more in the lessons taught in the MLLs. The third question investigates the students' attention spans during the lessons in the MLLs and the last question in this section aims at exploring whether the lessons in MLLs help students be motivated more.

Table 5

Students' attitudes related to motivational issues

		SD	D	NI	A	SA	Mean
Q12	f	13	40	50	272	135	3.93
	%	2.5	7.8	9.8	53.3	26.5	
Q13	f	11	52	53	267	127	3.88
	%	2.2	10.2	10.4	52.4	24.9	

Table 5 (continued)

Students' attitudes related to motivational issues

Q15	f	10	42	52	280	126	3.92
	%	2.0	8.2	10.2	54.9	24.7	
Q16	f	12	37	44	284	133	3.96
	%	2.4	7.3	8.6	55.7	26.1	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q12: I concentrate better when my teacher teaches in the MLLs.

Q13: I participate in lessons more when my teacher teaches in the MLLs.

Q15: It is easier to keep my attention when we study in the MLLs.

Q16: MLLs make it easier for me to be motivated during the lessons.

As can be seen in the Table 5, while the means scores here, which range between 3.88 and 3.96, are not quite as high as those in the first section, they still do show a majority of agreement or strong agreement with the items. For the first item, a majority (80%) of the respondents either agreed or strongly agreed with the idea that MLLs increase their concentration span although about 10% expressed their disagreement and another 10% reported having no idea about this item. Perhaps because they report feeling more concentrated in the MLLs, a majority (77%) also agreed with the second item, reporting that they participate in the lessons more as well. In the open-ended section, 23 students stated that they felt like the lessons were always student-centered and they never fell behind the process in the MLLs. Based on the results of question 15, 80% of the students believe that MLLs enable them to keep their attention until the end of the lesson. For the last item, the mean score (M=3.96), indicates that MLLs have the potential of increasing the level of students' motivation. In line with the 82% percent agreement with this statement, 34 students also added in positive comments related to motivation, as in this example:

When we have a lab hour on that day, I go there cheerfully because I love to be there and study there (Student 134).

We study Listening and Speaking lessons in the MLL. I wish we could have Reading and Writing lessons there too because my teacher is a perfect guy (Student 39).

Out of all the comments, in the two of them it was stated that since they are accustomed to look at their teachers during the instruction, being have to communicate with computers decrease their motivation.

I do not want to ask for permission from a computer to say something. If I have to, I will not say the answer even if I know it (Student 487).

Section 5: Students' Attitudes Related to Time Management and Organizational Issues

This section was composed of three questions based on the students' attitudes related to time management and organizational issues in the MLLs. The first item in this section is a negative statement which explores whether the students felt they were able to keep up with the pace of the lesson in the MLLs. The second item aims to investigate whether the students felt that the lessons in the MLLs are more planned and organized. The last item in this section tried to investigate the attitudes of the students on the notion of time management issues in the MLLs.

Table 6

Students' attitudes related to time management and organizational issues

		SD	D	NI	A	SA	Mean
Q17	f	86	248	70	65	41	2.46
	%	16.9	48.6	13.7	12.7	8.0	
Q18	f	12	33	49	293	123	3.95
	%	2.4	6.5	9.6	57.5	24.1	

Table 6 (continued)

Students' attitudes related to time management and organizational issues

Q19	f	6	39	60	277	128	3.95
	%	1.2	7.6	11.8	54.3	25.1	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q17: When my teacher teaches in MLLs, I cannot keep up with the pace of the lesson because the lesson is much faster.

Q18: The lessons become more organized in MLLs.

Q19: MLLs save time.

Table 6 indicates that Q18 and Q19 have the same high mean scores (M=3.95), which shows that the students generally agreed with these two items. As can be seen from item 18, a large majority (82%) of the respondents agreed with the idea that MLLs have the potential of making the lessons more organized. A similar percentage considers that MLLs can be a time saver for both students and teachers. When we look at the seventeenth question, although the majority of the students report that they did not have any problem with the pace of the lessons taught in MLLs, a fairly large percentage (21%) agreed that the pace increases to the point that it might cause them problems. Some of the students expressed their opinions regarding this issue in the open-ended section. One of the students commented as follows:

I am not as talented as my friends at computers. Before I type in my answer, the sessions ends (Student 487).

As for the opinions in terms of time management issues stated in the open-ended response section, 26 of the respondents made relevant comments. Sixteen of them complained about the number of lab hours in their schools, using statements such as:

The number of lab hours should be increased in order to make the most of MLLs (Student 28).

They all stated that they study just two hours in the MLLs each week, and suggested that no activity can reach its purpose within these two hours. In order for MLLs to be effective, they believe they need to spend more time in the lab. Two students pointed out that the labs are locked too early, which prevents them from finishing their work there.

Section 6: Students' Attitudes Related to Differences between Traditional Class Teaching and MLLs

This section contains two questions which seek for the students' ideas about the differences between the teaching and learning that goes on in traditional classrooms versus that in MLLs.

Table 7

Students' attitudes related to differences between traditional class teaching and MLLs

		SD	D	NI	A	SA	Mean
Q20	f	41	198	124	102	45	2.83
	%	8.0	38.8	24.3	20.0	8.8	
Q21	f	59	247	101	70	33	2.55
	%	11.6	48.4	19.8	13.7	6.5	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree STD: Standard Deviation

Q20: There is no difference between my teacher's teaching techniques and methods in traditional class and MLLs.

Q21: I think there is not much difference between my learning in MLLs and in traditional class.

As is seen in Table 7, while the results show a fairly mixed response, they also show a tendency towards feeling that there are indeed differences between the kinds of teaching and learning that go on in the MLLs as compared with that in the traditional classrooms. According to the results of the first item, nearly half of the respondents thought that their experiences with their teachers' techniques and methods in their actual classrooms and MLLs were not the same (47%). However, 29% of the students had the feeling that their teachers *were* using the same techniques in both settings, which might be the result of either the teachers' actually using the same materials in both the classrooms and in the MLLs or the students' lack of knowledge about the terms 'methods' and 'techniques'. This lack of knowledge about the terms might also be reflected in the high percentage of respondents who chose the 'No Idea' option (24%). As for the last question of the student questionnaire, 60% of the students indicated that there is difference between their learning experiences in the two different settings. For the same item, however, a considerable amount of the respondents pointed out their disagreement with the idea that there is a difference between their learning in these two different settings (20%). This might be because of the fact that the students have not experienced the MLLs enough to be able to notice the outcomes of the MLLs by comparing the two settings, or that the activities and the instruction were very similar to those traditional classroom.

Section 7: Factors Affecting Student Attitudes towards Use of MLL

One-way ANOVA tests were used to determine whether there were any significant differences between the mean scores of student attitudes and such variables as age, number of lab hours, and level of proficiency. The researcher tested these variables against Q1 (I learn more when we study in MLLs), Q10 (I prefer

lessons that are taught in MLLs), Q13 (I participate in lessons more when my teacher teach in the MLLs), and Q14 (MLLs make learning more interesting and exciting).

After analyzing the data, no significant differences were found between the two variables , hours of exposure to MLLs and students' level of proficiency, and the mean scores of the questions above. However, there was a significant result between students' ages and their feelings towards learning more in MLLs (see Table 8).

Table 8

Students' ages and feelings of learning more with MLLs

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.037	3	3.679	4.735	.003
Within Groups	393.137	506	.777		
Total	404.175	509			

Dependent Variable: Q1

Tukey HSD

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
16-19	20-23	.067	.088	.869	-.16	.29
	23-26	.225	.117	.219	-.08	.53
	26- above	.724*	.210	.003	.18	1.26
20-23	16-19	-.067	.088	.869	-.29	.16
	23-26	.157	.123	.576	-.16	.47
	26- above	.656*	.213	.012	.11	1.21
23-26	16-19	-.225	.117	.219	-.53	.08
	20-23	-.157	.123	.576	-.47	.16
	26- above	.499	.227	.124	-.09	1.08
26- above	16-19	-.724*	.210	.003	-1.26	-.18
	20-23	-.656*	.213	.012	-1.21	-.11
	23-26	-.499	.227	.124	-1.08	.09

*. The mean difference is significant at the 0.05 level.

Q1: I learn more when we study in MLLs.

As it can be interpreted from the Table 8 above, there is a significant difference between students' ages and their opinion about MLLs being a more fruitful environment over traditional classrooms in terms of learning. Regarding the results above, it can be inferred that as the age of the students increase, the feeling that they learn more in MLLs becomes more positive. In other words, we can say that the older students appreciate the learning environment in MLLs more compared to the younger students. This might be because younger students are more into using their cell phones rather than sitting in front of a computer for a long time.

Part 2: Teachers' Attitudes towards the Use of Multimedia Language Labs
Section 1: Teachers' Attitudes Related to MLLs in terms of Teaching

This section presents the findings which emerged from the statistical analysis of the first nine question of the teacher questionnaire. These questions were aimed at investigating the teachers' attitudes towards MLLs by revealing the potential of MLLs as teaching tools. Specifically, the supposed benefits of MLLs put forth by the decision-makers of this project during training sessions, such as their being a time saver and a good supplement, enabling teachers to become more competent and having greater control in the lab, and making reviewing much easier for teachers, were included in order to find out whether teachers had positive or negative attitudes towards these presumed advantages. Moreover, this section of the questionnaire also sought to explore participants' attitudes on whether MLLs are effective in teaching new language points and in correcting students' errors that emerged during instruction.

Table 9

Teachers' attitudes related to affective factors

		SD	D	NI	A	SA	Mean
Q1	f	0	3	3	40	15	4.10
	%	0.00	4.9	4.9	65.6	24.6	
Q2	f	3	15	7	30	6	3.34
	%	4.9	24.6	11.5	49.2	9.8	
Q3	f	0	1	5	34	21	4.23
	%	0.00	1.6	8.2	55.7	34.4	
Q4	f	0	6	16	32	7	3.66
	%	0.00	9.8	26.2	52.5	11.5	
Q5	f	1	5	8	37	10	3.82
	%	1.6	8.2	13.1	60.7	16.4	
Q6	f	2	14	6	25	14	3.57
	%	3.3	23.0	9.8	41.0	23.0	
Q7	f	0	0	4	36	21	4.28
	%	0.00	0.00	6.6	59.0	34.4	
Q8	f	0	5	23	26	7	3.57
	%	0.00	8.2	37.7	42.6	11.5	
Q9	f	0	7	6	36	12	3.87
	%	0.00	11.5	9.8	59.0	19.7	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree

- Q1: Computers in MLL are effective in teaching students new language points.
 Q2: When teaching in the MLL, I spend more time for the preparation of the lesson.
 Q3: I think MLL makes it easier to reach different sources and display them to the whole class immediately.
 Q4: Computers in MLLs are effective in correcting students' errors.
 Q5: I can give more effective explanations with the use of MLLs.
 Q6: With the help of MLLs, I can easily control the whole class.
 Q7: I think MLLs can be a good supplement to support teaching.
 Q8: Teaching in the MLL makes me a more efficient teacher.
 Q9: Teaching in the MLL makes it easier for a teacher to review, re-explain, and summarize the subject.

As the mean scores shown in Table 9 indicate, teachers generally have a positive attitude towards MLLs in terms of their potential as a teaching tool. On the other hand, the teachers have somewhat mixed opinions about whether MLLs require more time for preparation before the lessons or not (Q2, $M=3.34$). Thirty percent of the respondents disagreed with this item, which may suggest that those teachers are using the online platforms either available on the computers in MLLs or are using the online packs provided by the course books, both of which require minimal preparation. Since 60% of the teachers agreed with this item, however, it can be implied that the idea that MLLs save time, a position held by the decision-makers behind the MLL project, was not as convincing to the teachers as expected. As for the highest mean score of this section, an overwhelming majority of the teachers agreed with the seventh question (93%), revealing that nearly all of the respondents think that MLLs in some way can be a support for instruction.

Questions 1, 5, 7, 8, and 9 can be subcategorized as relating to the effectiveness of MLLs in actual teaching. Firstly, a large majority of the teachers believe that MLLs enable them to introduce new language points (Q1, 90%). Just three teachers (5%) disagreed with this item, a position which might possibly be less about the MLLs themselves, but because of the time allocated for the teachers to use the MLLs, as one of the teachers pointed out in the open ended section as follows:

Labs support the teaching and learning process for sure. However, with limited time they are nearly useless (Teacher 2).

Most of the teachers also agreed with the idea that MLLs allow them to give more effective explanations (Q5, 77%). Regarding the highest mean score without a single disagreeing response, 93% of the respondents have no doubts about MLLs' strengths as a supplement for language teaching ($M=4.28$). In the open-ended section, one of the teachers suggests that this asset should be extended to other departments as well:

Labs should be an inseparable part of language teaching at universities not only for students studying English major, but also for all departments (Teacher 9).

If we look at the 'No Idea' responses in Table 9, it can be seen that the teachers were expressing the most unsure feelings about the eighth question (38%), which was asked to find out whether they feel themselves more efficient when they teach in MLLs. Their unsureness about this question might be caused from the term 'efficient', which might depend on people's perception of the word. Although this item has the most undecided responses of all in this section, over half of the respondents nevertheless believe that MLLs help them feel more efficient (54%). In terms of the responses given for the ninth item, it is seen that in addition to their benefits of introducing new points and giving more effective explanations through the applications installed, MLLs are also considered relatively effective in reviewing, re-explaining, and summarizing (79%).

As for the rest of the questions in this section (Q3, Q4, and Q6), they can be mentioned in the subcategory of technical advantages of MLLs on teaching. The teachers gave the second highest positive responses to the third question ($M=4.23$). They consider that MLLs provide teachers with the opportunity to reach different sources and display them to the whole class immediately. A majority of the teachers (64%) also agreed with the fourth question, which seems to indicate that computers in MLLs can be effectively used to correct the students' errors. At the same time,

however, 26% of the respondents reported having no idea on this question. This large undecided number might be because of the types of the activities done and software used in the language teaching process, because only if the teachers use the Sanako software can they monitor the students' work in MLLs. As for the last item in this section, over half of the respondents feel that MLLs enable them to control the class if needed (64%), but nearly a quarter of the teachers have negative opinions about the potential of MLLs on class management (24%). Again, this hesitance might be due to the fact that they do not use the Sanako software because, as previously mentioned, it is only through using Sanako that the teachers can monitor the students' PCs in the MLLs. If the teachers are using any software other than Sanako, they might experience difficulty in engaging the students in the lesson when they go off task. On the other hand, in the open-ended section, one of the teachers expressed one of the deficits of Sanako as follows:

When you are web-browsing in a strict policy, some students always find a way around and surf the banned websites. This is a problem of Sanako (Teacher 45). There are two issues to be considered here. First, teachers can utilize the facility of the software to monitor students' screens in order to prevent such situations. Second, this comment should be taken into consideration by the project owners who used to claim that no such things can happen in MLLs.

Section 2: Teachers' General Attitudes toward the Use of MLLs

Five questions in this section intended to explore teachers' general attitudes towards the use of MLLs. Only the tenth question aimed to seek a direct answer for whether they have positive feelings towards MLLs or not. The rest of the questions explore their negative feelings, such as whether they feel uncomfortable while using the computer, if they have doubts about their students' preparedness for this tool, and

if they feel they can be efficient without using technology in their traditional classes. Moreover, Q14 delved into the possible reasons for any negative attitudes by exploring whether they feel themselves competent in using MLL-based applications.

Table 10

Teachers' attitudes towards the use of MLLs

		SD	D	NI	A	SA	Mean
Q10	f	0	4	2	37	18	4.13
	%	0.00	6.6	3.3	60.7	29.5	
Q11	f	14	38	2	6	1	2.05
	%	23.0	62.3	3.3	9.8	1.6	
Q12	f	12	27	15	6	1	2.30
	%	19.7	44.3	24.6	9.8	1.6	
Q13	f	13	36	4	6	2	2.15
	%	21.3	59.0	6.6	9.8	3.3	
Q14	f	14	37	7	7	0	2.11
	%	23.0	54.1	11.5	11.5	0.00	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree

Q10: I like making use of MLLs for teaching purposes

Q11: I feel uncomfortable in front of my students while using the computer in the MLL.

Q12: I do not think my students are ready for this technology.

Q13: What I do in class with traditional methods is sufficient in teaching English.

Q14: I am not good at with MLL-based applications.

As is seen in Table 10, there is only one question (Q10) which has a high mean score showing an overall positive attitude. According to the calculated mean scores, although teachers show a strong disagreement with the rest of the questions,

their responses are actually evident of overall positive feelings since these questions express negative opinions.

For the tenth question, which has the highest mean score ($M=4.13$), an overwhelming majority of the respondents expressed their liking the use of MLLs for teaching purposes in general (90%). Assuring this positive attitude, only four teachers stated that they did not like to utilize MLLs for teaching at all.

The lowest mean score in this section belongs to the eleventh question, which aimed to reveal whether the teachers feel stressed while using the computer in MLLs ($M=2.05$). When it is considered that this question express a negative statement, this low mean score actually represents a positive attitude, and a lack of stress, when teaching through the computers in MLLs. However, 11% of the respondents did report their discomfort with the computers, of which the reason could be either their lack of computer skills, which was revealed through Q14, or that they teach in MLLs only because their administration wants them to do so, as pointed out in one of the comments in the open-ended section:

The administration should be informed by the Council of Higher Education about how to use these labs. Although I am not trained for this technology, my director just put me here and told me to use it (Teacher 55).

Although this comment does not seem to reflect the teachers' overall attitudes, considering the frequencies in Table 10, it might help to explain some of the divergent responses.

Regarding the twelfth question, although 64% of the respondents believe that their students' readiness for this technology is at a desired level, the teachers have more mixed ideas for this question compared to other items in this section. For example, a quarter of the respondents have doubts about whether their students are

ready to use this technology. Even more strongly, 12% of the teachers agreed that the students are not yet ready for MLLs. For the next item, 80% of the teachers think that instruction through traditional methods alone is not sufficient, and a mere 13% felt there is no need for MLLs in teaching English. As for the last item in this section, 74% of the teachers believe that they can use MLL-based applications very easily. For the same item, a similar number of teachers (12%) either reported having no idea about whether they are capable of using the applications or outright disagreed that they have the skills for this technology. In the open-ended section, one of the teachers, reflecting possible doubts about his/her own skills and the potential of the MLLs, pointed out the following:

When I think about the labs, I can say that we are still not using this device professionally (Teacher 23).

Section 3: Teachers' Attitudes towards MLLs in terms of Motivational Issues

In this section, there are four questions aimed at investigating teachers' attitudes towards MLLs in terms of motivational issues. The questions intended to reveal the teachers' opinions about whether they believe that MLLs facilitate a more enjoyable and interesting learning environment for their students, improve students' attention spans, and promote an environment where students can interact and participate more. Also, one question directly sought an answer to the question of whether the students are more motivated when teachers use MLLs for teaching purposes.

Table 11

Teachers' attitudes in terms of Motivational Issues

		SD	D	NI	A	SA	Mean
Q15	f	-	1	7	41	12	4.05
	%	-	1.6	11.5	67.2	19.7	
Q18	f	-	6	10	42	3	3.69
	%	-	9.8	16.4	68.9	4.9	
Q19	f	1	6	5	40	9	3.82
	%	1.6	9.8	8.2	65.6	14.8	
Q20	f	-	2	3	52	4	3.95
	%	-	3.3	4.9	85.2	6.6	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree

Q15: I think MLLs make learning more enjoyable and more interesting.

Q18: I can keep my students' attention longer with the help of applications in MLLs.

Q19: I think MLLs increase the interaction and participation of the students.

Q20: I think my students are more motivated when I make use of MLLs in my teaching.

As the mean scores in Table 11 indicate, the teachers have positive feelings towards all of the statements in this section. The first item in this section has the highest mean score (M=4.05). Only one teacher did not think that learning process is more enjoyable and interesting through MLLs. Three quarters of the respondents think that MLLs enable students to keep their attention longer during the lessons (74%). A large majority of the teachers (81%) also think that interaction among students and their participation is facilitated by MLLs. However, one doubt was raised by one of the teachers who brought up a local problem specific to the software they use:

There needs to be better software in the lab in order to share content with users. Ours is quite problematic and not user-friendly (Teacher 19).

As for the final item in this category, nearly all of the respondents (92%) think that their students' motivation level is higher thanks to the MLLs during the lessons taught in the labs.

Section 4: Teachers' Attitudes Related to the Issue of Training

This section includes two questions addressing the issues about training of teachers who use MLLs. One of the questions explores teachers' general opinions about training for the computers in MLLs while the other question looks for an answer to what they feel without enough training.

Table 12

Teachers' attitudes related to the issues of training

		SD	D	NI	A	SA	Mean
Q16	f	0	1	3	32	25	4.33
	%	0.00	1.6	4.9	52.5	41.0	
Q17	f	1	8	17	24	11	3.59
	%	1.6	13.1	27.9	39.3	18.0	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree

Q16: I believe that training is required to teach in MLLs.

Q17: If I do not get sufficient training, I do not feel comfortable with using computers in MLLs.

According to the calculated mean scores, it can be said that the teachers agreed with both statements, which means that they consider that it is necessary for teachers to have sufficient training in order to use this technology without any experiencing any problems. However, they have mixed ideas about whether they themselves are comfortable with using the computers without sufficient training. As

is seen in Table 12, nearly all of the teachers reported that training is a necessity for teachers to teach in MLLs (94%). However, a comment pointed out by a teacher in the open-ended section could bring a different perspective for this issue. He wrote:

Training is a two-folded issue. Many people believe that it is important, [but] they do not want to learn about new technologies much because of some drawbacks such as burden of teaching hours and the necessity to catch up with the schedule (Teacher 16).

The responses given to question 17 are a bit mixed. Although over half of the respondents (57%) feel that without getting enough training they might be uncomfortable with teaching in MLLs, 15% of them believe that they can still handle it even if they do not get enough training.

On the training issue, one of the teachers basically summed up what seems to be the generally strong feeling in favor of training with these words:

Not only the teachers who are volunteer or technology lover should get training, but also all of the lecturers who they work at school where MLLs are available should be required to get the training. Otherwise, having a MLL seems meaningless (Teacher 37).

Section 5: Teachers' Attitudes Related to the Council of Higher Education

The last two questions of the second section of the teacher's questionnaire were analyzed in terms of issues related to the Council of Higher Education (CoHE) in Turkey. Since the CoHE was the project initiator, and during the training sessions the CoHE representatives clearly stated that they should be contacted when needed for any questions or problems emerged about MLLs, the researcher especially included two items accordingly in order to find out the teachers' opinions about the CoHE. The first question in this section aimed to investigate whether the teachers felt they could easily reach out to the CoHE in case of emergency such as solving a

technical problem in the MLLs while the second question intended to reveal whether the CoHE provided content for the institutions as was promised during the first training sessions. (See Table 13)

Table 13

		<i>Teachers' attitudes related to the Council of Higher Education</i>					
		SD	D	NI	A	SA	Mean
Q21	f	7	14	38	2	0	2.57
	%	11.5	23.0	62.3	3.3	0.00	
Q22	f	12	8	30	11	0	2.66
	%	19.7	13.1	49.2	18.0	0.00	

Note: f: Frequency SD: Strongly disagree D: Disagree NI: No idea A: Agree SA: Strongly agree

Q21: I can easily reach the CoHE to solve technical problems in MLLs.

Q22: The CoHE is very helpful in providing content for us.

While both items express positive opinions about the CoHE, the mean scores of both imply otherwise. As can be clearly seen in Table 13, only two teachers reported that they did not experience any problems with getting in touch with authorities in the CoHE when needed, whereas 35% of the respondents said that it is not easy to contact with someone from the CoHE when they face with technical problems. This was the issue on which the most comments (33 out of 47) were made in the open-ended section. For example, one of the teachers wrote:

We have never received the technical support so far. It is almost impossible to find a contact for the support we need regarding the computers and the software (Teacher 17).

Another teacher stated that although they did not experience any technological problems, they did have hardware problems in the labs:

..., but our biggest problem is the design of the computers. The mobile parts of the computer desks usually break down and we cannot find technical support for this issue (Teacher 4).

In the same vein, another teacher brought up a more specific hardware problem:

Switches located on each computer are low quality; that's why we need to call the service very often (Teacher 14).

For the same item, a majority of the teachers reported having no idea (62%), which might stem from their not having had any technical problems or from their not having ever tried to contact the CoHE for technical help—perhaps because they were able to solve any problems themselves. When we look at the agreement scores of both items, question 22 is higher than question 21. Eighteen percent of the teachers agreed that the CoHE provides institutions with content to be used in MLLs while nearly two times that number reported otherwise (33%). Almost half of the respondents were doubtful about this item and chose the option 'No Idea' (49%). The reason for nearly half of the respondents choosing this option could be that they might have their own material to use in the MLLs and did not try to request any from the CoHE. Regarding the content issue, some of the teachers pointed out some complaints:

Software support by the CoHE could help us enrich the system and content (Teacher 17).

If the material (the computer or the software) we use causes problem more often than normal, we as teachers cannot reach our goal and the teaching process is interrupted (Teacher 8).

To summarize both of the questions, one of the teachers made a general comment about technical and content issues:

The CoHE should find a solution for the maintenance, technical and content support for MLLs immediately. Most of these labs in Turkey are used as internet rooms rather than a language lab (Teacher 23).

Although not directly related to these two items, one of the teachers brought up a striking issue. Since it is closely related to the CoHE, it should be included here:

I do not believe the CoHE did a good job in terms of informing school administration about the importance of these labs. School administration do not allow us to use the labs. ..., they just guard the computers in case there happens something wrong with the hardware there... (Teacher 21).

This problem might be the reason behind the low mean scores of both items. To be more explicit, what might be inferred from these items is that the CoHE did not adequately follow up on the project; therefore, some of the teachers could not contact with them and some of them could not solve the problems they had with their own institutions' administrations about the use of MLLs.

Section 6: General Use of MLLs

In this section, as a response to the third research question of this study, , five questions were asked to the teachers in order to reveal how Turkish university EFL teachers report using MLLs in their instructions. . The first question directly addressed the frequency of breakdowns in MLLs (Q23) (see Table 14). The next two items (Q24 and Q25) investigated both whether the number of the computers available in MLLs constitutes a problem for teachers and what kind of solutions they have for this issue (see Table 15). As the last two items of this section, Q26 and Q27 aimed to find out the frequencies of teachers' use of the software and programs available either online or in the MLLs (see Table 16).

Table 14

The Frequency of Breakdowns in MLLs

Q23		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Usually	2	3.3	3.3	3.3
	Often	8	13.1	13.1	16.4
	Sometimes	21	34.4	34.4	50.8
	Rarely	30	49.2	49.2	100.0
	Total	61	100.0	100.0	

Q23: How often do the computers in MLL break down?

As is clearly seen in the table above, despite the fact that almost half of the respondents stated that the computers in MLLs cause technical problems (51%) ranging from occasionally to usually, almost half of the teachers (49%) reported that they do not experience any problems almost at all. This indicates that the problems revealed in the previous section (see Table 13) in terms of lack of technical support are not so frequent.

Table 15

The Frequency of Whether the Number of the Computers Is a Problem

Q24		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	41.0	41.0	41.0
	No	36	59.0	59.0	100.0
	Total	61	100.0	100.0	

Q24: Is the number of the computers in the MLL a problem for you?

Q25: If 'yes' for the 24th question, how do you solve that problem?

As Table 15 shows, nearly 60% of the respondents think that the number of the computers available in the MLLs cannot be considered a problem. The ways in

which they use the MLLs or the number of the students in a class in their institution might help these teachers experience no such problem. However, a considerable amount of the respondents (41%) indicated that the amount of the computers available in the MLLs is potentially a problem, which might hinder effective instruction there. Q25 asked the teachers who think in this way to state what kind of solutions they come up with for this problem. Since this is an open-ended question, a categorization from the given responses was carried out, which revealed two main solutions to deal with the problem. The first way proposed by a significant amount of the teachers (three fourths) is grouping the students. They reported that although it might seem as a good solution, it might bring some other problems as well. For example, one of the respondents pointed out that:

I make two students share one computer, but this is a big problem for some activities especially for listening parts. (Teacher 23)

Although none of the respondents reported that they could not find any solution to the mismatch in the number of computers and their own students, it seems that most of them are not comfortable with the way they think the best. One of the teachers underlines:

Before each lesson, I hope some of my students do not show up in the class. That's really bad to think about the solution before every lesson. (Teacher 51)

The second approach to this issue is to occupy both labs at the same time if available. Although some of the respondents pointed out that finding an empty lab is not so easy, in some of the institutions the class schedule was prepared accordingly. In both situations, it can be inferred that the logic behind the use of MLLs has to be ignored, which might potentially trigger a general dislike of MLLs by both teachers and students.

Table 16

The Programs Used by Teachers in MLLs

		Responses	
		N	Percent
Frequencies of program use	Sanako	36	42.4%
	NetLang	31	36.5%
	Adobe	4	4.7%
	None	14	16.5%
Total		85	100.0%

The last two items of the teacher questionnaire intended to reveal the frequencies of teacher use of the programs installed in MLLs and the other online programs they prefer in their instruction in MLLs. Q26 was a multi selection item, in which teachers could choose as many options as they wished, and mainly addressed the three main programs usually installed in the computers in MLLs: Sanako 1200, Net Languages, and Adobe Connect. As Table 15 shows, Sanako 1200, which is both an online and offline multimedia teaching environment, appeals most to the teachers (42%). It is important to state that Sanako 1200 is the main software that the project holders highlighted before and during the installation of the MLLs. The project planners also indicated that the main idea behind this project was to make the most of this software in language teaching. It should also be underlined that Sanako 1200 is the main feature of MLLs that distinguishes them from self-access centers or traditional computer labs.

The other programs can be used with or without Sanako 1200. If we consider the feature of Net Languages that provides a wide range of content, the rate of 37 % could have been higher. However, on considering the fact that Net Languages

requires a password from the CoHE and this study has shown that some teachers experience problems when they try to find a contact person from the CoHE, it can be proposed that some of the teachers find it difficult to handle with the password problem. With respect to Adobe Connect, considering that it is only a platform where teachers are supposed to prepare their own instruction accordingly, the low number of responses (5%) can be understandable.

As for the 27th question, it aimed to reveal the other programs that teachers utilize when they teach in MLLs. Fourteen respondents reported that they are not using any of the programs (See Table 16). Interestingly, half of these 14 teachers stated that none of the programs above was installed in their MLLs, which contradicts with what the project holders initially promised. Almost all of them reported that they instead utilize the online packs provided by the course book they use. In the words of one teacher:

Sanako does not work for a year. We have our own online material and we use it as a complementary. (Teacher 13)

Section 7: Factors Affecting Teacher Attitudes towards the Use of MLL

The possible factors that affect attitudes of teachers towards MLL use were sought through one-way ANOVA tests. The researcher intended to find out whether there are any differences between teachers' attitudes and such variables as age, experience and number of lab hours taught. In order to find a significant connection, the researcher tested these variables against Q1 (Computers in MLL are effective in teaching students new language points.), Q7 (I think MLLs can be a good supplement to support teaching.), Q10 (I like making use of MLLs for teaching purposes.), and Q15 (I think MLLs make learning more enjoyable and more

interesting.). After performing the test, no significant relationship was found between any of the variables and the questions above.

Part 3: Administrators' Attitudes towards the Use of Multimedia Language Labs

The interviews, which were conducted to explore the attitudes of administrators towards MLLs, were held at five different universities where MLLs were being used. These administrators were chosen from five different regions of Turkey in order to demonstrate an equal distribution. These regions are Marmara, Black Sea, Mediterranean, Aegean, and Central Anatolia. The transcript data obtained from the interviews were analyzed according to the responses of interviewees for each of the six questions. All the responses for each question were examined in the aim of eliciting similarities and differences between the attitudes of the administrators. The ultimate aim of these interviews was to reveal whether the administrators, who are the decision-makers of the institutions, promote this technology or have doubts about it.

The first question of the interview intended to find out the administrators' opinions about the use of technology in the English language teaching process in general. More specifically, their views were requested about whether EFL instructors should use technology in their classes. On analyzing all of the interviewees' responses, it was revealed that they exceptionally regarded using technology for language teaching purposes as a necessity. They believe that a teacher should be up-to-date in every respect including being aware of the current technological advances. One of the interviewees commented that:

As you may well know, there are two terms about this issue: digital natives and digital immigrants. Although I personally call myself as a digital immigrant, as institution, we have young personnel here. Despite the average of age here, still I do

not believe we are a digital native institution. All of the staff here, including me, need to keep up with the technology in order to be able to communicate well with our students (Interviewee 5).

In the same vein with this comment, two administrators stated that keeping up with the technological advances is a requirement, especially for EFL teachers. To support this view, one of the interviewees made an interesting comment on something we already know but have not thought much on:

...for example, we teach writing in English through paper and pencil. They write in the class and do homework or project work on a paper by using pencils. However, they will not use paper and pencil when they start working after graduation. They will use computers, to send emails, write reports, prepare presentations, etc. (Interviewee 2)

While talking about digital natives, two of the administrators mentioned about using technology in self-study. They pointed out that teaching English is not only teaching the four skills, but also teaching how to study when the students leave the classroom; therefore the instructors should include learning through technology in some part of their lessons because the students try to improve their English mostly through videos, online applications, games, and different websites.

The second question was designed to explore the views of administrators on efficiency of the use of technology by the instructors at their institutions. Almost all of them reported that they track the extent of technology use at their institutions through professional development or information, communication and technology (ICT) units. One of the administrators stated that the ICT unit in particular was of great importance to direct the use of technology at their institutions:

...you may not know what is happening in classroom next to yours. The teacher there might be using very interesting and enjoyable applications such as Kahoot, Edmodo, etc., but you might not be aware of them. Therefore, I initiated the ICT unit at this school in the aim of bringing these applications to the light (Interviewee 2).

Although two of the interviewees believe that their colleagues do their best to include technology in at least some part of the lesson, three of them expressed their negative opinions about this question. They underscored that the workload of the teachers and the necessity of not falling behind the schedule might cause the teachers to regard the preparation necessary for technology use in their classes as an extra workload, which results in an undesirable (inadequate) level of technology integration.

Most of the responses given to the third question, which aimed to reveal the extent of administrative support for MLLs, were specific to the institutions. Only technical support can be counted as the common support provided by the administrations in all schools. All of the interviewees agreed that because of the frequency of the breakdowns in MLLs, they should improve themselves in order to meet their teachers' needs. They either try to find a contact person in the CoHE to fix the problem, which was one of the biggest problems for teachers as revealed from the analysis of the teachers' questionnaire, or they call a computer technician from the information technology department of their university.

In terms of other kinds of support, one of the interviewees reported that he initiated an ICT unit and assigned two of the teachers who had received MLL training provided by the CoHE in 2011, as responsible for the lab. He pointed out that this made things faster by allowing only big problems to come to the administration level and enabling small problems to get fixed before they were reported to the administration. Similarly, despite not having an ICT unit, one of the interviewees stated that he organized training sessions on how to use MLLs more professionally, to be given by two already trained instructors. However, another interviewee complained that in the place he worked there was a high level of teacher

circulation, and that both of the teachers who had received the CoHE training in 2011 subsequently left the institution:

...the only thing I can do is to encourage our teachers to attend meetings and conferences because CoHE did not provide us with the necessary training. Fortunately, I had wanted those two teachers to organize short sessions for our teachers where they talked about MLLs. So, we have a general idea about what we can do there (Interviewee 5).

Another interviewee underlined how including weekly lab use in their curriculum fostered the use of MLLs at their institution:

The students are evaluated on their works they do with their teachers in MLLs. These works are well-defined by our material and curriculum development units and the students are evaluated on this work at the end of each term. Even if the teachers do not want to use MLLs, the students push them to do so because of grading (Interviewee 4).

The aim of the fourth question was to investigate the factors that possibly influenced the administrators to promote the use of MLLs at their institutions. All of the interviewees were well aware of the fact that the labs installed in their departments were a part of a project initiated by the CoHE and the Ministry of Transport and Communication in Turkey. In other words, all of the five administrators regarded encouraging the use of the labs as a necessity. For instance, one of the respondents declared that the project was in the news, both on the internet and TVs even before they actually started installing these MLLs in the institutions, which, he underlined, made the adoption of them an obligation rather than an option. Four out of five interviewees highlighted how the teachers who got the training from the CoHE at the beginning of the project played a crucial role in inspiring other instructors at their institution. Similarly, one respondent stated that one of these trainee teachers was the assistant director of the institution, which sped up the process of integration of MLLs. Another interviewee pointed out that they used the

labs because the CoHE sent official letters to their institution inquiring about the current use of MLLs, a reference not made by any other interviewee.

In the fifth question, it was aimed to find out the most common problems EFL teachers face while using MLLs in their institutions. On analyzing all of the responses of the five interviewees, three main problems that were common in all of the institutions were identified: technical problems, the number of the computers, and the training issue. The administrators without exception agreed that the biggest problem was the number of the computers in the labs. As a condition of the contract signed by the stakeholders of the project, each university was supposed to be equipped with two labs, each with 20 computers. All of the interviewees stated that there was a difference between the numbers of their students in classes, which was 23 in average and the numbers of the computers in MLLs. In order to solve this problem, three of the interviewees stated that they generally made both of the MLLs convenient for one teacher at a time so that they can use as many computers as they wish. In the aim of making both labs available for a teacher, one of the administrators came up with an interesting solution to do so. He said that each lab had been installed in separate rooms and they combined these two rooms by tearing down the wall between the two rooms. In addition to this issue, the most frequent problem reported to administrators by the instructors who used the MLLs was technical problems. According to two interviewees, they often experienced power cuts that affected the power in the whole building. Also, three of them reported that they often had to change the headphones in the MLLs because they broke very easily. Another common problem reported by the interviewees was the training issue. Three of the interviewees pointed out that either because of the lack of trained teachers on MLLs or, as one of them described it, ‘low-trained’ teachers—those who did not attend the

actual training in 2011, but had attended sessions organized by their colleagues who *had* experienced that training—even small problems that emerged in the MLLs were usually reported to the administration. This practice hinders the flow of the lesson and kills the students' motivation since they cause an interruption.

As for the last question of the interview, the administrators' opinions about the benefits of MLLs in English teaching settings were sought. Although each of the interviewees declared that they often got positive feedback both from teachers and students, two of them were critical of the MLLs. Nevertheless, all of them stated that there should be a place for technology use in at least some part of the instruction in their schools and that MLLs were the best technological tools that could fill this place. According to the interviewees, the distinguishing features of MLLs were that the teachers can monitor their students' works simultaneously so that they can provide immediate feedback to them, and that teachers can run virtual pair, group, or round-table discussions so as to improve the students' conversational skills.

Apart from these positive feelings towards MLLs, one of the interviewees touched on a more specific issue. He reported that:

When we negotiate with our teachers in the meetings, I can sense the enthusiasm of them to use technology. However, sometimes I feel that we cause our students to get bored of technology because of the snowball effect of those small problems that our teachers face in MLLs. When I put myself in their place, I can say that those interruptions would kill my motivation (Interviewee 1).

He also observed that although, as an institution, they gave utmost attention to the term 'professionalism', the frequency of interruptions caused by technical problems harmed the image of their school in the students' eyes.

Part 4: Reasons for Not Using MLLs

In 2011, the CoHE organized a three-day training session, which was attended by two instructors from each state university all around Turkey, after the labs were installed in their institutions. For the purpose of obtaining the contact information of these trainees, I sent an email to the CoHE. After being provided with the contact list, I sent emails to 188 attending instructors representing 100 different state universities.

The purpose of the emails was to reveal first whether they would like to participate in the study if they were using MLLs, and second if they were not using MLLs, what reasons they had. Teachers from 45 different institutions replied to the email, of which 16 reported that MLLs were in use and they were volunteer to participate in the study, and 29 indicated that they were not using MLLs, and reported their reasons. The data obtained from the emails received from these 29 different universities were categorized in order to elicit the common and different reasons for not using MLLs. According to the analyzed data, in addition to a few institution-specific reasons, four key categories emerged from the mails received from these universities, which were located in all regions of Turkey (See Table 17).

Table 17

Regions of the Institutions

Regions			Regions		
	f	%		f	%
Aegean	3	10	Marmara	7	24
Black Sea	4	14	Mediterranean	4	14
Central Anatolia	7	24	Southeastern Anatolia	2	7
Eastern Anatolia	2	7			
			Total	29	100

Note: f: frequency, %: percentage

The most frequent reason given for not making use of the MLLs was the discrepancy between the number of the students and the computers available in each lab. In one-third of the received mails, it was reported that the insufficient number of computers in the MLLs affected their decisions not to use this technology. Those who put forth this discrepancy as a reason reported that they had generally 30 or more students in each class, which made the use of the labs highly problematic. In addition to the number of the students in each class, one of the institutions complained about the total number of the students in the school:

We have a good reason for not including these labs in our teaching program at all. There are 3,000 students in our school. There is no way to manage that many students with just two labs with 40 computers in total (One of the universities from Central Anatolia).

Stemming from this discrepancy, another reason that emerged for leaving these labs closed was that a great number of the institutions were finding it difficult to integrate the MLLs into any part of the instruction. In three of the received mails, the instructors wrote that the administration and their colleagues were quite eager to utilize the MLLs; however, they could not come up with a suitable way to offer lab courses for all of their students. They also stated that they already have enough self-access centers, and they did not want to use MLLs as self-access centers either. One of the instructors wrote in the mail that they had just adapted a new syllabus in their institution at that time and decided not to use the labs because they thought that the use of the labs would be unclear and problematic; therefore, they preferred not to use them to avoid those problems. Similarly, another instructor reported that since they did not have enough personnel for the MLLs to use them as self-access centers and they had too many students, they considered that neither using it as a self-access center, nor integrating it into the program as a course was possible.

The third category identified after analyzing the received emails is that of the support from the CoHE. Almost one-third of the institutions emphasized two kinds of support expected from the CoHE: technical and content. As for the first one, it can be said that the frequency of software and hardware problems that emerged in the MLLs during the actual use or even before starting to use them led the institutions to take a negative decision about the integration of the MLLs into the program. One of the biggest problems reported by the instructors was the power capacity of the rooms where the computers were installed. It was pointed out that they could not even turn on the computers and the server machines because of the power problem, and lab technicians called from the department of information technology were not able to start the system. Regarding the other support expected from the CoHE, the content support was another problem that the institutions faced. Many of the instructors stated that the CoHE did not provide the students with passwords to use the online content which was provided as one of the conditions of the project. One of the instructors also wrote that they were not provided admin passwords either in order to initiate the virtual classes or to monitor their students' progress. Although the technical and content support might seem the apparent problems, the main reason causing these problems to arise is actually the communication problem with the CoHE. Many of the emails underscored that they were unable to solve these problems because they could not reach out to anyone from the CoHE about the MLLs.

The last category of common reasons for not using MLLs relates to the actual locations where the MLLs were installed. A quarter of the received emails pointed out that since they did not have a preparatory school, the MLLs were installed in other buildings of different faculties. For example, one of the instructors wrote that

after he attended the training sessions in 2011, he found out that his institution's labs were actually installed in the Faculty of Science and Letters. Another instructor stated that they were installed in the Faculty of Engineering. Both of these instructors reported that since the MLLs were in other departments, they were not allowed to use them. Similarly, one of the respondents complained that although the labs were intended to be used for language learning and teaching purposes, neither she nor any other her colleagues were allowed to use the labs since they were in the service of various centers, such as centers of life-long learning. Also, three of the instructors reported that they had not even known about the MLLs because they were installed in the vocational schools.

Although not as common as the abovementioned widespread reasons cited, it is of importance to also mention some other issues indicated by the instructors, since they were noted as reasons leading to the closing of some MLLs. Firstly, three of the instructors complained about the attitudes or actions of their school directors regarding the MLLs. One of them wrote that his director thought that MLLs should be closed because the hardware in the rooms could be stolen or damaged by the students. Another stated that their director considered MLLs as unnecessary and argued they occupied space for no good reasons. It was also reported by one of the instructors that the administration in their school regarded MLLs as an unnecessary investment and believed that the CoHE should have purchased Interactive Whiteboards instead of MLLs. Finally, another respondent declared that since MLLs did not have even Microsoft Office program, they wanted to make changes in the computers; however, because of the guarantee conditions, they could not do so. Therefore, he believed that the computers in MLLs should be modified to function for general purposes.

Conclusion

In this chapter the analysis of the data collected through student and teacher questionnaires, interviews with administrators, and emails received from institutions were presented. The analysis of both questionnaires revealed students' and teachers' attitudes towards the use of MLLs in language learning and teaching. Also, the emails were used to find out why MLLs are not used in some institutions.

In the first section, the data, obtained from 510 students, related to their attitudes was analyzed and presented based on seven categories: issues related to learning, technical issues, affective factors, motivational issues, time management/organizational issues, differences between traditional class teaching and MLLs, and factors that affect student attitudes. In the second part, the data analysis of the teacher questionnaire (61 in total) was categorized based on seven sections: attitudes related to teaching, general attitudes, motivational issues, training, the Council of Higher Education (CoHE), general use of MLLs, and factors that affect teacher attitudes. In the third part, the interviews with five administrators were analyzed based on the similarities and differences between their responses for each question addressing attitudes towards the use of MLLs were presented. In the final part, the emails received from 29 different state universities were analyzed and the data was introduced based on the similarities and differences of the reasons for not using MLLs.

The next chapter will discuss the results of the study with the findings in the literature and present pedagogical implications followed by the limitations of the study.

CHAPTER V: CONCLUSION

Introduction

The purpose of the study was to cast light on the attitudes of students, teachers, and administrators towards the use of multimedia language labs (MLLs) in English language classrooms at tertiary level. The study also aimed to reveal the factors affecting these stakeholder's attitudes and the reasons for not using MLLs. In this regard, the study addressed the following research questions:

- 1) What are the attitudes of students, teachers, and administrators towards multimedia language labs in Turkish state university preparatory schools?
- 2) What factors may affect these stakeholders' attitudes towards MLLs?
- 3) How do Turkish university EFL teachers report using MLLs?
- 4) What are the reported reasons for not using MLLs?

In order to seek answers to these questions, 45 state universities were investigated, sixteen of which reported that MLLs were being actively used. Five hundred ten students with different proficiency levels of English and 61 teachers from these institutions were given two different Likert-style questionnaires regarding their attitudes towards MLL use in language learning and teaching. Also, one-way ANOVA tests were run to determine the factors that affected the attitudes of the students and the teachers towards this technology. Interviews were conducted at five different universities where MLLs were being used in the aim of eliciting the attitudes of administrators. Finally, emails received from 29 institutions where MLLS were reported as *not* being used were thematically analyzed in order to elicit the reasons.

This chapter is divided into four main sections. In the first section, the findings from the study will be discussed in the light of the research questions and relevant literature on MLL use. The next section will discuss pedagogical implications drawn from the findings. The third section will present the limitations of the study, and the final section is devoted to suggestions for further research.

Findings and Discussion

This section is divided into three main parts. In the first part, major findings from the student and teacher questionnaires will be discussed in six categories: issues related to learning and teaching; affective factors and general attitudes; motivational issues; technical issues and general use of MLLs; training and the Council of Higher Education; and differences between traditional classroom teaching and MLLs. The second part is devoted to findings from the interviews with administrators. In the third part, factors that affect the attitudes of students and teachers towards MLL use in language learning and teaching will be discussed. Finally, the reasons given by instructors responsible for MLLs, regarding why the MLLs are not being used in their institutions, will be reported.

Students' and Teachers' Attitudes towards MLL Use in EFL Classrooms

Section 1: Attitudes of Students and Teachers Related to Learning

In general, the result of the surveys in this study show that both students and teachers feel that MLLs have the potential to foster language learning by making lessons more fruitful, especially when they are accompanied by appropriate audio and visual materials. This notion was also suggested by the results of previous studies. In Safraz's (2010) study, one hundred students from an undergraduate program were surveyed through pre and posttests, questionnaires, and lab observations. A majority of the students in the study reported their positive feelings

towards learning in MLLs and experienced a great progress especially in oral skills. Similarly, in his study, Patel (2013) suggests that effective use of multimedia resources in MLLs enhanced the students' communicative abilities. The implications drawn from these two studies are also in line with the comments of the some of the students in the present study, who pointed out that their teachers should spend more time in the MLLs on communicative practices rather than grammar activities. The results of the current study also revealed that students appreciate MLLs more when they are used with their full capacity rather than using them just as computers.

Similarly, teachers in this study also reported that they regard MLLs as a good supplement in English language instruction and that MLLs are greatly beneficial in reaching a wide range of resources and showing them on each student's screen. Overall, nearly all (90%) of the teachers agreed that MLLs are effective in teaching new language points. These positive perceptions of MLLs regarding teaching English are in harmony with what is proposed in the literature. For example, Mahdi and al Dera (2013) also suggest that success in language learning and teaching with MLLs is highly possible, particularly if both sides have positive attitudes. Hartanto (2014) also found that MLLs were considered beneficial in developing students' English language skills, particularly listening. Slight differences could be found on the other hand, between the findings of this study and others on the issue of error correction. In the literature, the effectiveness of computers in correcting student errors has been revealed to be as a 'difficult issue'. Beatty (2010) hesitates whether computers can differentiate errors in early efforts which should be ignored and errors which should be corrected (p.92). However, the findings of the present study indicated that computers in MLLs can be effectively used in students' error correction. This difference might stem from the nature of the error correction being

considered, or the teachers in this study might have highly used the activities which require only immediate error correction.

Of all the statements in this category, almost two thirds of the teachers disagreed with the idea that preparation time for a class in an MLL is less compared to the time spent before a regular classroom instruction—in other words, they felt that it actually takes longer to prepare for an MLL class than a regular one. This finding is especially important in that it contradicts with the argument of decision-makers of the MLL project, who highlighted the effectiveness of MLLs in saving time for teachers. It should be noted here that teachers might overcome the preparation time issue by preferring to use commercial software of the course books instead of the software installed in MLLs since, according to Moss et al. (2007), the time that teachers spend for preparing their own resources is almost twice than using commercial software. The teachers' reporting on time for preparation may therefore also suggest that the MLLs are being used as traditional computer labs rather taking advantage of the full benefits of the MLL and the Sanako software that is installed there.

Section 2: Attitudes of Student Related to Affective Factors and General Attitudes of Teachers' towards MLLs

The findings obtained from this section of both questionnaires are of great importance in terms of eliciting the students' feelings, concerns, and preferences about the use of the computers in MLLs. A great majority of the students reflected a positive attitude towards using the computers in the labs. In parallel with this, a similar, very large percentage of the students reported that they preferred to spend their time for learning in MLLs rather than in regular classrooms. These findings are also supported by the results of previous studies that focused on students'

perceptions of the MLLs in terms of affective factors. For example, Haider and Chowdhury (2012) investigated ways to promote communicative language teaching (CLT) in a CALL setting. Although the participants in their study were teachers, the implications drawn from the students' views were of great significance in that they reflected how the course designed in the labs helped students overcome their shyness and speak fluently in front of others. They also stated that the courses created confidence among students. In the present study, many students mentioned about how being an active participant of the learning process was something that they could not feel in their classrooms as much.

However, almost half of the students felt that their teachers should not show their works to the whole class, which was one of the prominent features of the Sanako 1200 software. This finding adds a new dimension to what is proposed in the literature and forces us to rethink this feature. For instance, in his study, Vanderplank (2010) concludes that the most powerful aspect of MLLs is its feature that enables a teacher to monitor and control all of the students' computers in the room, which distinguishes them from their successors, traditional language labs. He also puts forward that this feature plays a significant role in most of the teachers' positive attitudes towards this technology. The current study shows, however, that this feature may also lead to practices with mixed popularity among the students. The reason why the participants in this study shy away from their works to be shown to their classmates might be because of their proficiency level or anxiety level. Therefore, teachers should be careful in making use of this feature of the software. For instance, they can display only the good products of the students by checking them first before showing it to the whole class, or they can encourage them by taking advantage of the feature that enables teacher-student monitor sharing as a starting point.

As noted above, a vast majority of the teachers have positive attitudes toward the use of MLLs as a language teaching tool. More specifically, the present study reveals that teachers feel competent enough in using MLL-based software, which arguably explains why most also report feeling comfortable during the time spent in MLLs with their students. Similarly, almost two thirds of the teachers in the present study agreed that the students have no difficulties in terms of readiness for this technology, and that the teachers themselves do not suffer from a lack of knowledge about MLL-based applications. This overall positive attitude and sense of competence of both respective stakeholders is accounted for in the literature. For instance, in a nation-wide study in the United Kingdom, Toner et al. (2008) investigated teachers' views on the use of MLLs in higher education and found that language teachers felt at ease with the technology available in MLLs and, in addition, most have developed their own digital or multimedia materials to use in their instruction. According to the responses of 87 teachers in that study, teacher reaction to digital labs is highly positive with very strong approval for the opportunities they offer to teach communicative skills and promote autonomy in language learning.

In addition to the teachers' positive attitudes, the findings of the present study also revealed some concerns of teachers about their particular role in the MLL. One of the teachers stated that technology in MLLs is different from traditional language labs in terms of what they require from teachers, and noted that teachers should adapt to these changes immediately. This is very similar to what Huang and Liu (2000) found in their study. They concluded that the teacher's role as a coach or a director should transform in an MLL into that of coordinator, as they must coordinate the flow of communication through computers between the teacher and the student as well as between the student and the computer. While this was only

raised by one teacher in this study, a deeper understanding of the issue of teachers' roles in the MLLs might provide insights to some of the other findings in this study, for example, explaining the negative feelings of some—even if it is very few—teachers towards their use.

Section 3: Attitudes of Students and Teachers Related to Motivational Issues

In terms of motivational issues, a good number of the students agreed that MLLs are very effective in increasing their concentration span and pushing them to participate in lessons more. This overall positive attitude of students is also accounted for in several studies in the literature. In one of these studies, Tarasiuk (2010), who moved her English class to an MLL in order to study the reactions of her students, commented that the students became very cheerful in their new learning setting. Similarly, in Pasupathi (2013), it was stated that even though the students were required to keep their motivation level up constantly in order for the technology-based intervention to actually improve their communicative skills, they still enjoyed working in MLLs throughout the term.

On the other hand, the findings of the present study are at variance with the findings of another study done in Turkey (Okan, 2008). In that study, the researcher investigated the evaluation of the psychosocial learning environment in language laboratories and concluded that the students were neither motivated nor able to concentrate enough to stay on task, which made them feel distanced from the teaching/learning process. This discrepancy between that study and the present study suggests a potentially important finding regarding MLLs. While the settings of both studies are the same and the institution investigated in the earlier work was also included in the current study, the nature of the language laboratories used is different. The change in the views about the labs over time can arguably be attributed therefore

to the transformation of the old lab into its multimedia successor. Apparently, thanks to new technological improvements over time, MLLs seem to have become more effective in keeping students engaged.

When we come to the teachers' opinions, they are in line with the students' opinions in this category. They believed that MLLs facilitate a more enjoyable and participatory learning environment for students. These findings about the potential of MLLs in increasing language teachers' motivational levels are supported by the literature as well. In Toner et al. (2008), it was stated that most of the teachers in the UK were heavily engaged in using technology in digital language laboratories. In addition, Chen (2008) discussed that as all English language teachers got accustomed to the growing trend of computer use in language teaching, the majority of them showed more interest and willingness to try it. In another study that was conducted in the same setting with the present study, Aydin (2013) explored Turkish EFL teachers' perceptions of computer usage in learning and teaching and suggested that a majority of them thought that computers are valuable and beneficial tool for effective instruction and were highly motivated to use them in their professional life. As the findings of the present study and the previous studies show, both students and teachers are highly driven by the idea of experiencing MLLs in the language learning process.

Section 4: Attitudes of Students Related to Technical Issues and Teachers' General Use of MLLs

In this section, an equal distribution was observed between the students who believed technical breakdowns negatively affected their motivation and those who stated otherwise. For the other item in this section, three fourths of students reported

that breakdowns in the MLLs did not occur often. The fact that half of the group stated that there was no relationship between their motivational level and technical breakdowns might therefore be because either these breakdowns were infrequent or, if they did occur, were fixed promptly. However, those that reported that technical problems in the MLLs decrease their level of motivation, reflect the frequent findings in the literature (e.g., Aydin, 2013; Haider & Chowdhury, 2012; Huang & Liu, 2000; Okan, 2008; Salcedo, 2009; Toner et al., 2008; Yunus et al., 2013). For example, in Toner et al. (2008) almost half of the teachers in the UK reported that technical problems impaired the effectiveness of their teaching, which eventually had a detrimental effect on student participation as well. In the same vein, one of the students in Haider and Chowdhury (2012) commented that when the headphones were not working, they were disturbed. Similar comments to this were highly observed in the present study as well. Although it might be regarded as a minor problem, it cannot be disregarded, especially in MLLs, when we consider that all of the communication there relies on headsets and microphones. Additionally, teachers should be competent enough to solve the problems in order that the students' concentration not be interrupted. This issue was also touched on in Huang and Liu (2000), in which a majority of the teachers were found to be inefficient in many situations, such as answering students' technical questions and diagnosing the temporary blackouts of computers. Therefore, from the present study and the earlier studies, it should be concluded that teachers should always have a backup plan in their minds such as having extra materials ready beforehand in case such problems occur during teaching so that the learning process is not negatively affected.

As for the general use of MLLs, the teachers were asked to report on the frequency of breakdowns, the types of the programs used, and the solutions they used

for the problem of not having enough computers. Like students, teachers did not report that the MLLs break down often. However, in the open ended section of the questionnaire, some of the teachers commented that they could not reach anyone from the CoHE to report the breakdowns, which led them to look for solutions themselves. Such comments suggest that rather than solely relying on the project holders in such incidents, it is advisable for participating schools and teachers to have backup plans in place, such as having technicians from their own institution ready before implementing MLL use.

Forty one per cent of the teachers stated that the number of the computers is a problem for them. As one of the requirements of the project, each MLL is made up of 20 computers plus one for the teacher. This number is problematic when we consider the number of students in the state universities with MLLs. Since, on average, there are usually 25 students in each preparatory school class, additional computers are generally needed in each MLL in order to assign each student a computer. During the trainings before the project was initiated, as one of the trainees, I asked the trainers directly about this issue. They responded that they were not aware of this issue and they did not have the authority to find an answer to this problem. In the present study, when the teachers were asked how they solved this problem, three quarters of them reported that they usually group students. At first, this might be the quickest and easiest solution, but it is actually against the nature of MLLs because teachers direct, monitor, organize, and encourage students through instantaneous voice communication. In Watts (1997), which was an evaluation of CALL software, the author cautions that before integrating CALL activities into language teaching, administrators and teachers must consider such needs as learner autonomy, mindful engagement, learner strategy development, and different learner

styles as being of utmost importance. Although Watts (1997) underlined teachers' and administrators' responsibilities before any CALL integration, the project-holders, primarily the CoHE, actually should have taken this discrepancy into consideration in this case. Regarding all of these issues, especially learner autonomy and different learner styles, raised in Watts (1997), making students share one computer might be the worst solution. For example, some students will not be able to participate in group or peer discussions and do the listening tasks since they will have only one headphone for each computer. Moreover, they might not contribute to any activity because of differences in their learning pace, both of which situations defy learner autonomy.

As for the types of the software used in MLLs, almost 80% of the teachers rated Sanako 1200 and NetLanguages higher than AdobeConnect and the various software programs they named in the 'other' option. This is significant because using MLLs without these two specific programs would make them essentially no different from self-access centers, which have been in use for decades. Sanako 1200 is the most important feature of the MLLs in terms of what it requires from a teacher. As highlighted in Davies et al. (2005), this software enables a teacher to monitor and control students' screens, create virtual discussion groups, talk to students individually or as a whole through headsets and microphones, open browsers in their screens, and save each session for different purposes. Also, it allows students to record their speech and receive immediate feedback on how comprehensible it is, talk to their pairs or to the whole class in discussions, chat with any of their classmates in the room, and utilize the internet as they wish. Davies et al. (2005) also point out that since software like Sanako 1200 provides versatility, ease of movement between different applications, interactivity, potential for teacher intervention, and

potential for independent learning, teachers should utilize it especially so as to improve students' oral skills. When we look at the overall positive attitudes of teachers in the present study and consider that a lot of institutions still are *not* using this technology in Turkey, it is advisable that further efforts be made to encourage trying this software before deciding to abandon these labs or turning them into self-access centers.

Section 5: Attitudes of Teachers towards the Issues Related to Training and the Council of Higher Education

The item in this section asking about teachers' opinions on training (Q16) is actually the item with the highest mean score in the entire teacher questionnaire (M=4.33), which indicates that almost all of the teachers agree with the idea that training is the main necessity before actually using MLLs. This finding has been supported by several studies in the literature (e.g., Haider & Chowdhury, 2012; Okan, 2008; Safraz, 2010; Toner et al., 2008; Vanderplank, 2010). Also, the view that teachers who are well trained on using MLLs effectively will be comfortable in the MLLs was also included in Mahdi and Al-Dera (2013). They first identified the 'good' teacher in a CALL setting as a teacher equipped with sufficient knowledge to handle any problems that might occur and then they concluded that good teachers and good technology together are of great importance in promoting educational improvement. In addition, both Meenakshi (2013) and Celik (2013) regard lack of proper training as the major reason for a CALL activity's failure to achieve the aimed at outcomes. Finally, Garrett (2009) writes that not only will the role of CALL in language instruction inevitably expand, teacher training has obviously become a major factor that defines the success of any CALL activity. One of the participants in the present study took this statement one step further, commenting that not only the

technology-lover teachers, but also every teacher should receive enough computer skills to survive in today's world.

Teachers' opinions about the Council of Higher Education (CoHE) in Turkey are of great significance in that the Council is one of the project initiators and is known as the only contact for MLLs. Although the teachers have positive attitudes towards MLLs in general, they are not so positive about issues related to the CoHE. For example, many teachers reported that it is difficult to contact with those in the CoHE who are responsible for the MLLs. This finding is significant because at the outset of this project, immediate technical support from the CoHE was promised to be provided when needed. On the contrary however, the findings of this study reveal that the CoHE's performance has been unsatisfactory when it comes to answering teachers' technical support needs. Although the literature on MLLs has not yet given us any similar studies in which a nation-wide project is evaluated, we can still infer the importance of technical support from a few small scale studies. For example, in Aydin (2013), it was revealed that inadequate technical and instructional equipment in schools and a lack of coordination between the teachers and the ICT coordinators caused an unsuccessful integration of CALL activities. Similar to the findings of the present study, according to Toner et al. (2010), a majority of teachers in the UK also suffered from inadequate technical support. As in that study, it is predictable that good technical support should help to alleviate or eliminate most of the problems. Considering the frequency of the complaints of teachers in the present study, the CoHE should improve its efforts to coordinate with the institutions for technical and instructional support as these seem to be the two key problems that increase teachers' negative perceptions of the CoHE and MLL project relationship.

Section 6: Attitudes of Students Related to the Differences between Traditional Classroom Teaching and MLLs

Students were asked to distinguish between their learning in traditional classrooms and MLLs. A majority of the students agreed that instruction in MLLs was more effective. This finding is also in line with a recent study, Kilickaya (2015), which found that computer-based instruction is more effective than traditional instruction in teaching adverbial clauses. In his study, the participants were 50 students in a preparatory course of a private language institution that prepares them for English language exams in Turkey. The students instructed by using both computer-based and teacher-driven grammar instruction supported by computer-based materials scored higher than those who received only traditional instruction. Furthermore, Safraz (2010) shows that a positive change was observed in the language learning ability of students working in a multimedia lab, which indicates that language learning in a setting other than the traditional classroom is relatively promising.

Attitudes of Administrators towards the Use of MLLs

Revealing administrators' opinions on the integration of technology in language instruction in general and incorporating the use of MLLs into their curriculum is of utmost importance in that they are the decision-makers. All of the administrators in this study were in favor of promoting technology in their institutions. They all felt it is important that their teachers keep up with innovations in educational technology not to let the gap between students and teachers grow. This responsibility of administrators is not just to motivate their teachers to update themselves and develop professionally, but also to lead their colleges and universities forward, a point that has been made in earlier research (e.g., Chen, 2008). In addition

to this requisite of teachers and institutions to be updated in terms of technology, as one of the administrators commented in the present study, before they graduate, students should be prepared for the real world too, where they will be surrounded with technology. When it comes to whether the teachers in their institutions use technology efficiently, the administrators pointed out how ICT units become crucial in bringing out any CALL activity that teachers are currently using or should utilize. Four out of five administrators stated that they have an ICT unit in their school and the other one hinted that he would initiate the unit next year. Also, two of the administrators reported that the reason they started an ICT unit was to monitor technology integration in their schools.

In terms of the extent of the administrative support for MLLs, the administrators mostly highlighted technical support such as trying to find a contact person in the CoHE, a technician from IT department, or assigning a teacher or student who is capable of fixing certain problems. This potential support from the administration is one of the milestones of a successful technology integration as underscored in Chen (2008), in which it was concluded that administrators should address teachers' concerns, which are fundamental to integrating technology into instructional practice. Providing necessary and appropriate support for teachers will remove the possibility of an inefficient MLL which might discourage teachers' enthusiasm and intents.

When it comes to what influenced the administrators' decisions to promote the use of MLLs available in their institutions, one common reason emerged out of all five administrators' interviews. They all agreed that teachers who received the training offered by the CoHE in 2012 played a crucial role in inspiring their colleagues. Interestingly, the way of the announcement of the project was also a

trigger to make a decision about using MLLs. Apparently, hearing about the project from the news and internet before having MLLs in their institutions, meant that the administrators were already affected by the idea. Another factor that affected the administrators' decision were the official letters sent by the CoHE inquiring about the current use of MLLs in the first year after the installation. As one of the administrators commented, responding to those letters negatively would make a bad impression on the CoHE since there was no logical reason not to use them. Therefore, the researcher believe that since this project is a huge investment, the CoHE should show the interest in these labs again and initiate a project follow-up by officially requesting reports on the use of MLLs from every institution throughout Turkey.

When requested to identify the common problems that the teachers in their institutions face during teaching in MLLs, the administrators agreed upon three major problems: the number of the computers, technical problems, and training issues. Of all three problems, the number of the computers available in each room was the most complained about one. In addition to the discrepancy between the available computers and the average number of students in each class, the ratio of the number of computers to all of the students at school makes effective integration of MLLs into the curriculum a real challenge for school administrations. Considering that a School of Foreign Languages or a Faculty of Education has at least 1,000 students on average, using MLLs effectively might become a real headache. As for the another problem raised by the administrators, it was revealed that since the CoHE did not organize any training session after the 2012 sessions, the administrators complained about the difficulty of finding someone who is proficient in using these MLLs. Since instructors' shifting among universities in Turkey is very common, it is

less likely with each passing year that every institution has an instructor who attended the training in 2012. For this reason, the CoHE should start new training sessions for instructors, which might also encourage the institutions where MLLs are not in use today. As the data analysis reveals in the previous chapter, since most of the institutions have reported that they are not using MLLs properly, this might be a good opportunity for each stakeholder. Also, it is advisable for the institutions where the trained instructors do still work to have them organize in-service trainings on MLLs in case they might move to another university in the future.

Another finding related to administrators' views on the benefits of MLLs reveals that they are all convinced that MLLs are the best technological tool available in their schools in the way of technology integration. Especially the opportunities that the software in MLLs offer, such as virtual round table discussions, providing immediate feedback, and monitoring and controlling student screens options, were all spoken of highly by the administrators. The reported feedback from teachers and students are also effective in their overall positive attitudes towards MLLs.

Factors Affecting Student and Teacher Attitudes towards MLL Use

In the aim of investigating the factors that affect participants' attitudes towards the use of MLLs in language learning and teaching, one-way ANOVA tests were performed to seek the differences between student attitudes and different variables such as age, hours of MLL use, and level of proficiency as well as the relations between teacher attitudes and different variables such as age, experience, number of lab hours, and the programs used in MLLs.

In terms of the students, such variables as age, exposure to MLLs, and their proficiency level were assumed to have an effect on their attitudes. Therefore, these variables were tested against the questions about learning more in MLLs, preferring

MLL lessons, participating more in lessons in the MLLs, and thinking that lessons in the MLLs are more interesting. The test results showed that only the age factor was found to be significant in students liking MLLs, indicating that MLLs are appreciated by older students more. This is a surprising finding because the opposite finding has been highly accounted for in the literature. For example, Hakkarainen et al. (2000) and Czaja et al. (1989) both found that younger students have more positive attitudes towards use of any kind of technology. Even in studies not showing a preference among younger students over older ones, the tendency was not the opposite finding but rather just that there was no difference between younger learners and older learners in embracing all kind of technology (e.g., Kennedy et al., 2008). The reason why older students are more positive to MLLs in the present study might stem from the older students' backgrounds. First, it might be assumed that learning English plays a key role in their departments, such as English language teaching, or international relations, which eventually puts high importance on English for these students. Similarly, these older students might be studying English at a university where English preparatory school is volunteer instead of mandatory; therefore, they appreciate English language learning more in general. Another prediction can also be drawn from this finding. Maybe because the students are a bit older, they tend to be more self-confident and better able to benefit from the features MLLs have to offer, which also might be because of learning styles that are addressed in the MLL activities in these schools. Finally, maybe these older students study at universities where the MLLs tend to be used more effectively, all of which might presumably lead older students to be more positive to this technology.

With regard to the factors affecting the attitudes of teachers, considering that teachers are very positive to MLLs in general as revealed in this study, it can be said

that using Sanako 1200 affect teachers' overall positive attitudes towards MLLs in language instruction. This is a very significant finding because the main purpose of this project was to use especially this program, which distinguishes the MLLs from traditional self-access laboratories. Teachers' not liking the programs other than Sanako 1200 might be understandable because they require an account with a username and password and, as revealed in the previous chapter, they might have experienced problems with contacting with the CoHE to retrieve usernames and passwords.. Overall, teachers seem to be happier when they use Sanako 1200 in MLLs.

In terms of the age variable, the finding that there is no correlation between teachers' age and their liking the MLLs is in line with Teo (2008) and Mahdi and Al-Dera (2013), both of whom found that a teacher's age did not have any effect on the successful implementation of technology in language teaching. Generally however, more studies have found that age is a factor effecting attitude. For example, Lin et al. (2014) suggests that younger teachers are more confident than older ones in integrating ICT into classrooms.

The final factors of experience and the amount of time spent in MLLs were not found to have an effect on teachers' attitudes, which is similar to the findings of Teo (2008). However, in Jimoyiannis and Komis (2007) and Lin et al. (2014), it was suggested that they are all associated with the attitudes of teachers towards using ICT in language teaching. In both studies, teachers' recent exposure to ICT and development of ICT skills were found to increase their willingness to adopt it. They also found out that the less experienced are positive in general while highly experienced teachers (especially those having 20–30 years of teaching experience) have negative feelings towards use of ICT. Also, Elaziz (2008) revealed that the

more teachers use interactive whiteboards, the more they like this technology. The reason why no correlation was found between exposure to MLLs and teachers' attitudes might stem from the program they use as revealed in the previous finding. Since teachers already use their own materials or software of course books for some time before MLLs were made available to their institutions, they might not be expected to develop a more positive attitude towards this tool. Obviously, only when a new technology is used, the exposure to it might be considered as an effective factor in teachers' level of liking it.

Teachers Reasons for not Using MLLs for Language Teaching Purposes

Based on the data collected by email correspondence with individuals at 29 different universities, the reasons for why the MLLs were not being used at the time of this study could be categorized under five headings: number of computers, impracticality in terms of integration, lack of support from the CoHE, location of MLLs, and problems related to administration.

The first common reason that emerged from the emails was again the number of the computers. This finding is in line with other findings related to the main problems put forward by both teachers and administrators using MLLs. Considering the all sections above related to this finding, the discrepancy between the number of the computers and students constitutes the biggest issue either causing the universities to leave MLLs or to use them ineffectively.

Impracticality in terms of integration MLLs into the curriculum of the institutions is another issue that teachers brought forward. There are two main reasons that caused this problem. First, there are not enough working stations for each student in a class. Second, the total number of students in a school makes it almost impossible to incorporate MLLs in the curriculum effectively. One of the most

complained about issues is that although the administration and teachers are both willing to make use of MLLs, there is not a suitable way to offer lab courses for every students in their institutions. At this point, there emerge two ways for administrations. One is to turn MLLs into self-access centers, and the other option is to close them completely. In either case, MLLs are not used for their intended purposes.

As discussed in the earlier section related to the problems with the CoHE, the teachers who are responsible for these MLLs also brought forward the lack of support from the CoHE as a reason for leaving the idea of using MLLs. They stated that they had expected two kind of support from the CoHE: technical and content, an expectation which had actually been promised to be met by the CoHE at the beginning of the project. These institutions either tried to use MLLs; however, in the course of time, when they faced with a technical problem or could not provide their students with necessary content and could not find a solution for either of them, they gave up on MLLs, or they did not even start using them because of the power problem in MLLs.

Another problem that some of the teachers faced was the actual location of MLLs. Although they were designed for the purpose of language teaching and learning, they were physically located in some other faculties other than School of Foreign Languages or English preparatory schools, either because they were at the departmental level and did not have their own buildings, or the presidency of the school wanted to have the MLLs be installed in another building. In either case, teachers lost control of the MLLs and could not have an opportunity to utilize these labs even if they had been trained on them.

As for the last category of this section, the teachers indicated that they experienced disagreement with their directors on using MLLs. Some of the directors have been reported that they have concerns on MLLs being damaged and, for this reason, they do not allow any teachers to use them. Also, the teachers reported that another reason for abandoning MLLs completely is due to the unwillingness of the administrators who consider MLLs as an unnecessary investment. A good coordination between teachers and administrators for a successful integration of MLLs is very important as mentioned earlier. Besides, as the findings of the interviews with the administrators revealed, they play a vital role in promoting the use of MLLs.

Pedagogical Implications

The findings of the current study suggest that although MLLs are regarded as a good supplement by students, teachers, and administrators, installing them in every state university does not mean that they are effectively used for language teaching purposes. Although all of the respective stakeholders have positive attitudes towards the use of MLLs, there are certain issues that should be considered before starting to integrate them into language instruction. Therefore, important implications can be derived from the present study for future teaching practices regarding use of MLLs.

The primary pedagogical implications that can be drawn from this study might be for the CoHE as it might be inferred from the findings that the main agent who can solve the problems related to MLLs is the CoHE itself. Firstly, the CoHE should find a solution to the accessibility problem because this is the most common issue reported by both teachers and administrators from all institutions, whether or not the MLLs are currently being used there. An effective communication infrastructure should be developed between teachers, administrators, and the CoHE

for a variety of issues regarding MLLs and their use. Lack of such an infrastructure leads to other problems, such as lack of technical and content support from the CoHE, both of which were promised to be provided by the CoHE as a part of the project.

In addition to such a general recommendation, the CoHE should take immediate action for some institutions, such as the one where the researcher is currently working, where MLLs have not been able to even start up since the first day of their installation due to inadequate electrical power problems. The findings of the study suggest that some teachers and administrators had planned to use the MLLs, but upon facing first-order barriers like these, ended up abandoning the MLLs completely. Accessibility to the CoHE regarding MLLs might not only help to solve the kinds of problems being faced by those institutions actually using the MLLs, but could also encourage those that are not using them, possibly by providing guidance on how to overcome certain initially blocking issues. In that sense, establishing a good communication line is the initial action that should be taken by the CoHE since the situation has apparently become a chain of problems that trigger other problems.

Once this communication system is set up, another series of training sessions should be offered by the CoHE, since this issue was the most popular common request that emerged in this study. Such a move is essential given that lack of training or a lack of trained instructors on MLLs to serve as internal trainers might have led some institutions to decide not to use the MLLs at all. Finally, the CoHE should initiate a project follow-up and reporting, which will possibly inspire the rest of the institutions as well. This can provide the CoHE with a wide range of valuable data about the current situation of the MLL project and encourage many institutions to find some ways to integrate MLLs in their curriculum rather than locking them up.

Overall, this will be a good start to find solutions to all of the aforementioned problems regarding the CoHE.

Another implication that might be inferred from the findings can be for administrators. As revealed in this study, the primary authority of the MLL project, namely the CoHE, does not take any initiative, so the decision-making seems to ultimately come down to individual administrators, which hangs the whole project on the balance of what those individuals think. The present study shows that they can be supportive in some cases but negative in others. Given that all of the administrators using MLLs are rather in favor of utilizing and promoting this technology, major steps can be taken by the other administrators who have trivialized the use of MLLs so far. As the only decision-makers about MLLs, administrators play the key role in their survival. In addition, they should arrange training sessions on the use of MLLs within the institution especially if the trained instructors are still their colleagues.

Another pedagogical implication that can be inferred from the present study has to do with instructors. Since both students and teachers are positive towards the use of MLLs in the language learning and teaching process, it can be argued that MLLs should be involved in language instruction. This can be done through a good cooperation with administrators. If instructors are eager to use this technology, the possibility of a successful integration seems very high. However, it should be ensured that every student be able to find the opportunity to experience these labs as much as possible. As revealed in this study, having two MLLs with 20 computers in each, especially in crowded schools, will pose definite scheduling challenges. If the average number of students in a classroom is above 20, then combining two labs into one might be a good solution. Even though this eliminates the possibility of two separate classes using the labs at the same time, and may therefore seem to actually

pose greater scheduling difficulties, it at least means that when a teacher has the MLL, s/he can use it properly and each student will be guaranteed his/her own computer. This factor of making sure that when the MLLs are used that the students get exposed to their full benefits should be a priority. Finally, as the main stakeholder and first hand users, teachers should be also careful about actually using the Sanako 1200 software rather than using MLLs as traditional labs, because it will be the primary way to fully recognize the strengths and weaknesses of them and to help students distinguish them from any other computer facilities they have encountered. All in all, the key is using the MLLs in the way they should be used. This means making sure every student in an MLL class gets his/her own computer, and making sure that the MLLs are being used in the way that makes them unique, so, using the Sanako 1200 software.

Limitations of the Study

The present study involved several limitations that require the findings to be interpreted with caution. To begin with, the students' overall perceptions of experiencing MLLs might vary depending on the medium of instructions they are subject to in their departments. For example, some of the students are studying in Turkish medium instruction, in which situation preparatory school is not a requirement but voluntary, and some of them are supposed to take 30% of their major courses in English, which requires them to study English at least one year in preparatory school. Since regulations for academic success in these institutions' preparatory schools are mainly designed according to this criterion, it also affects the students' perception of English. If, for example, the participants were in the voluntary group, their overall attitudes towards instruction in English might be already positive. On the contrary, if they were from the other group, they might not

have developed enough willingness to learn a foreign language, which eventually resulted in negative feelings towards the MLLs in general.

Secondly, the researcher did not administer any MLL teaching observations. The data gathered about the general use of MLLs were obtained only through questionnaires. Reported practices always have the potential to distort what is actually happening in these labs. Even when anonymity is promised, teachers or administrators may report, to some extent, what they think the researcher or other stakeholders want to hear. Therefore, a series of observations would have allowed for the study to delve deeper into the actual use of this technology by both students and teachers. Similarly, the researcher did interviews with only five administrators due to time and travel constraints. Although it was paid attention to choose them from different regions, interviews with more administrators would enable the findings related to their attitudes to be more generalizable.

Finally, the level of proficiency of the participants were not equally distributed. A great majority of them were pre-intermediate students. Therefore, if there had been an equal number of students from each level, the findings of whether level of proficiency affects students' positive attitudes towards MLLs would be more reliable. Similarly, the participants' studying hours in MLLs were not equally distributed either. Again, a great majority of them studied in MLLs for only 1-2 hours. If there had been a more equally distributed number of students in each category, it would have allowed for more accurate exploration of whether exposure to the labs affects student attitudes.

Suggestions for Further Research

Based on the findings and limitations of the present study, some suggestions can be drawn for further research. This research is a nation-wide study, which aimed to take a snapshot of current MLL use in Turkey by revealing the attitudes of students, teachers, and administrators, and to explore in general some possible factors that might affect the respective stakeholders' attitudes, their reported use of MLLs, and the reasons why MLLs were not being used in some institutions. While such a broad, large-scale study was needed to give a general picture, many details remain unexplored. Therefore, detailed classroom-based research is urgently needed. Since MLLs are relatively new to Turkey and, as the literature review revealed, there has not been any research done specifically on MLLs, classroom-based research can further develop the findings of the present study. For example, according to the findings of this study, MLLs increase student participation. In that sense, it can be the particular focus of an MLL-based study to investigate in more detail whether and in what exact ways students feel themselves more involved in the MLL lessons. Similarly, it could be useful to explore the changing role of teachers in MLLs.

Similarly, the effectiveness of MLLs in EFL setting should also be explored further. Even though the participants of this and other studies have reported they feel MLLs are an effective supplement in learning and teaching English, this idea needs confirmation through classroom-based research. For example, MLLs have been claimed to improve students' oral skills. An experimental study is needed to check whether they really contribute to these skills or not. Such findings would add additional basis (for or against) to decisions about the need to equip institutions with more MLLs, since the number of the computers is one of the biggest problems currently being faced, as this study suggested.

Finally, in the aim of revealing the factors that affect students' and teachers' liking this technology, an equally-distributed number of participants in terms of exposure to MLLs and level of proficiency need to be investigated through a large-scale research. Through this, future researchers can confirm whether there are certain things to consider while scheduling the courses in these MLLs.

Conclusion

This study aimed to explore the attitudes of students, teachers, and administrators towards the use of multimedia language labs (MLLs) in English language classrooms. Forty-five state universities were investigated in order to elicit the use of MLLs. It also aimed to reveal the reported use of MLLs, factors that affect the respective stakeholders' attitudes towards them, and the reasons for not using them in language instruction. The findings revealed that students, teachers, and administrators are generally positive to the idea of using MLLs for language learning and teaching purposes. Students believe that MLLs increase their motivation and participation in the lessons because they think that the lessons in MLLs are more enjoyable and interesting. Similarly, both teachers and administrators perceive this technology as a good supplement for teaching English. These findings suggest that MLLs can and should be integrated into foreign language instruction. However, there is a need to take a few important issues into consideration, such as how to cope with technical problems and the need for training before actually starting using them. For an effective integration of this technology in the Turkish case, the CoHE plays a key role. It should take immediate action to investigate the current use of MLLs, solve the reported problems, and take initiatives to further promote their use. It should also be noted that once the students and teachers use these labs with their full capacity, they will likely be appreciated even more by both sets of users.

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APPENDICES

APPENDIX A: Student Consent Form English Version

Dear Participant,

I am a student at Bilkent University MA TEFL program. You have been asked to participate in a thesis study, which aims to explore students', teachers', and administrators' attitudes towards the use multimedia language labs (MLLs) in English language instruction at Turkish state universities. I am also investigating the factors that affect students' and teachers' attitudes towards MLLs in English classes.

There are 28 questions in the questionnaire and it will take 2-3 minutes to answer them. Your personal information will be kept confidential and limited to my own research. I would like to thank you once again for your participation and cooperation.

Yasin Karatay
MA TEFL Program
Bilkent University
yasin.karatay@bilkent.edu.tr

I have read and understood the information given above. I hereby agree to my participation in the study.

Name:

Signature:

Date:

APPENDIX B: Student Consent Form (Turkish Version)**Bilgilendirilmiş Onam Formu**

Sayın katılımcı,

Bilkent Üniversitesi Yabancı Dil Olarak İngilizce Öğretimi (MA TEFL) bölümünde Yüksek Lisans öğrencisiyim. Amacı devlet üniversitelerinde bulunan öğrencilerin, öğretmenlerin ve yöneticilerin İngilizce derslerinde multimedia dil laboratuvarı (LAB) kullanımına yönelik tutumlarını ölçmektir. Ayrıca, öğrencilerin ve öğretmenlerin İngilizce derslerinde LAB kullanımına karşı tutumlarını etkileyen faktörleri de araştırmaktayım. Ankette toplam 28 soru vardır ve tamamlaması 2-3 dk sürmektedir. Vereceğiniz bilgiler kesinlikle gizli tutulacak ve kendi çalışmamla sınırlı kalacaktır.

Şimdiden katkılarınızdan ve işbirliğinizden dolayı teşekkür ederim.

Yasin KARATAY
Bilkent Üniversitesi/ MA TEFL Programı / Y. Lisans Öğrencisi
Email:
yasin.karatay@bilkent.edu.tr

Yukarıda verilen bilgiyi okuyup anladığımı ve çalışmaya katılmayı kabul ettiğimi beyan ederim.

Adı:

İmza:

Tarih:

APPENDIX C: Student Questionnaire (Turkish)

Bölüm I: Genel Bilgiler

1. Okulunuz:
2. Yaşınız: 6-14.... 15-19.... 20-25.... 26 ve yukarısı _
3. Cinsiyetiniz: Erkek.... Kız....
4. İngilizce seviyeniz: Elementary.... Pre-Intermediate....
Intermediate.... Upper-Intermediate....
Advanced....
5. Sınıfınız : Hazırlık 1. 2. 3. 4.
6. Bir hafta içinde kaç saat laboratuvarda İngilizce dersi yapıyorsunuz?
1-2 saat 3-5 saat 6 saat ve yukarısı
7. LAB en çok hangi becerilerinizi geliştirmektedir?
Listening Speaking Reading Writing
.... Grammar Pronunciation

No	Lütfen, sizin görüşünüzü en iyi biçimde yansıtan kutuyu (✓) şeklinde işaretleyiniz ve lütfen her bir ifade için yalnızca bir cevap seçiniz.	Kesinlikle Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle Katılmıyorum
1	LAB’de ders işlediğimizde daha fazla öğreniyorum.					
2	LAB’de ders işlediğimizde konuyu anlamak daha çok kolaylaşıyor.					
3	Bilgisayarın İngilizce öğrenmem açısından ders kitabından bir farkı yoktur.					
4	LAB’de kullandığımız görsel ve işitsel materyaller konuyu daha kolay anlamamı sağlıyor.					
5	LAB sayesinde bir konuyu daha fazla ve değişik kaynaktan öğrenme imkanı buluyorum.					
6	LAB’da yaşadığım teknik problemler (bozuk kulaklıklar ve çalışmayan mikrofonlar gibi) motivasyonumu düşürüyor.					
7	LAB’deki bilgisayarlar sıklıkla bozuluyor.					

8	LAB'deki bilgisayarları kullanmayı seviyorum.					
9	LAB'deki bilgisayarları kullanmak bana zor geliyor.					
10	Normal derslerdence LAB'in kullanıldığı dersleri tercih ederim.					
11	Benim çalışmamın ya da ödevimin tüm sınıfa LAB'deki sistem ile gösterilmesi beni rahatsız ediyor.					
12	LAB'de ders anlatıldığında derse daha fazla konsantre oluyorum.					
13	Hocamız LAB'de ders işlediğinde derse daha fazla katılıyorum.					
14	LAB öğrenmeyi daha zevkli ve ilginç hale getiriyor.					
15	LAB'de ders işlerken dikkatimi daha kolayca toplayabiliyor ve daha uzun süre koruyabiliyorum.					
16	LAB derse karşı motive olmamı kolaylaştırıyor.					
17	Hocam LAB'de ders işlerken çok hızlı ilerlediği için takip edemiyorum.					
18	LAB'de dersler daha planlı ve organize hale geliyor.					
19	LAB zaman kazandırıyor ve dersin daha hızlı ilerlemesini sağlıyor.					
20	Hocalarımızın LAB'de ve sınıfta ders anlatırkenki öğretim tarzları ve yöntemleri aynıdır.					
21	Bana göre normal sınıfta ve LAB'de ki öğrenimim arasında çok büyük bir fark yok.					

1. Ekleme istediğiniz başka bir şey var mı?

.....

2. Laboratuvarların kullanımını ile ilgili herhangi bir tavsiyeniz veya şikayetiniz var mı?

.....

Teşekkürler.

APPENDIX D: Student Questionnaire

Section I: Background Information

1. School:
2. Age : 6-14.... 15-19.... 20-25.... 26 or above
3. Sex : Male Female....
4. Proficiency Level: Elementary.... Pre-Intermediate....
Intermediate.... Upper-Intermediate....
Advanced....
5. Class : Prep Freshman Sophomore Junior.
Senior.
6. How many lab hours do you have in a week?
1-2 hours 3-5 hours 6 hours above
7. Which skill(s) do you think MLLs improve?
Listening Speaking Reading Writing
Grammar Pronunciation

No		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree
1	I learn more when we study in MLLs.					
2	It is easier to understand the lesson when we study in MLLs.					
3	Computer is not different from the book from the point of my learning English.					
4	Audio and visual materials we use in MLLs helps me understand the lesson better.					
5	I find the opportunity to learn from different sources with the help of MLLs.					
6	Technical problems (broken headphones and microphones) which I encounter in the LAB decreases my motivation.					

7	Computers in MLLs often break down.					
8	I like using the computers in MLLs.					
9	It seems difficult for me to use the computers in MLLs.					
10	I prefer lessons that are taught in MLLs.					
11	It makes me uncomfortable when my work is shown to the whole class with the system in the MLLs.					
12	I concentrate better when my teacher teach in the MLLs.					
13	I participate in lessons more when my teacher teach in the MLLs.					
14	MLLs make learning more interesting and exciting.					
15	It is easier to keep my attention when we study in MLLs.					
16	MLLs make it easier for me to be motivated during the lesson.					
17	When my teacher teaches in MLLs,, I cannot keep up with the lesson because the pace of the lesson is much faster.					
18	The lessons become more organized in MLLs.					
19	MLLs saves time.					
20	There is no difference between my teacher's teaching techniques and methods in traditional class and MLLs					
21	I think there is not much difference between my learning in MLLs and traditional class.					

Section III: Additional ideas and suggestions

1. Is there any other comment you would like to add about the use of labs:

.....

2. Any problem or suggestion about the use of labs

.....

Thank you.

APPENDIX E: Teacher Questionnaire

Section I: General Information

1. Your Age: 20-25 26-30 31-35 36-40
41-45 46-above
2. Gender: Male Female
- 3- Your highest educational degree: Undergraduate Master Doctorate
4. Years of Teaching Experience: 1-5 years 6-10 years 11-15 years
16-20 years 21- above _
- 5- Your current academic position: Instructor Lecturer Asst.Prof.Dr.
Assoc.Prof.Dr. Professor
6. How many hours do you teach English in the lab in a week?
1-2 hours 3-5 hours 6-10 11 or more hours
7. For which language skills do you use MLLs most?
Listening.... Speaking Reading Writing
Grammar Pronunciation
- 8- What is the average number of students in your class?

No	Items concerning the role of computer in language teaching. <u>Please, answer each considering the MLL applications in your school.</u>	Strongly	Agree	No idea	Disagree	Strongly Disagree
1	Computer is effective in teaching students new language points					
2	When teaching in the MLL, I spend more time for the preparation of the lesson.					
3	I think MLL makes it easier to reach different sources and display them to the whole class immediately.					
4	Computers in MLLs are effective in correcting students' errors.					
5	I can give more effective explanations with the					

	use of MLLs.					
6	With the help of MLLs, I can easily control the whole class.					
7	I think MLLs can be a good supplement to support teaching.					
8	Teaching in the MLL makes me a more efficient teacher.					
9	Teaching in the MLL makes it easier for a teacher to review, reexplain, and summarize the subject.					
10	I like making use of MLLs for teaching purposes.					
11	I feel uncomfortable in front of my students while using the computer in the MLL.					
12	I do not think my students are ready for this technology.					
13	What I do in class with traditional methods is sufficient in teaching English.					
14	I am not good at MLL-based applications.					
15	I think MLLs make learning more enjoyable and more interesting.					
16	I believe that training is required to teach in MLLs.					
17	If I do not get sufficient training, I do not feel comfortable with using computers in MLLs.					
18	I can keep my students' attention longer with the help of applications in MLLs.					
19	I think MLLs increase the interaction and participation of the students.					
20	I think my students are more motivated when I make use of MLLs in my teaching.					
21	I can easily reach the CoHE to solve technical problems in MLLs					
22	The CoHE is very helpful in providing content for us.					

23. How often do the computers in MLL break down?

Always Usually Often Sometimes

Rarely Never

24. Is the number of the computers in MLL a problem for you? Yes No

25. If 'yes' for the 24th question, how do you solve that problem?

.....

26. Which software do you use most for language teaching purposes?

Sanako AdobeConnect Net Languages None

27. If checked 'none' for the 26th question, how do you solve that problem?

.....

Section III: Additional ideas and suggestions

1. Is there any other comment you would like to add about the use of labs:

.....

2. Any problem or suggestion about the use of labs

.....

APPENDIX F: Interview Questions

- 1) Do you think that the use of technology is necessary for EFL instructors?
(İngilizce öğretmenleri için teknoloji kullanımını gerekli görüyor musunuz?)
- 2) Do you think that EFL instructors benefit from technology sufficiently?
(Sizce İngilizce öğretmenleri yeterince teknolojiden faydalanıyorlar mı?)
- 3) How do you support the use of multimedia language labs (MLLs) in your institution?
(Kurumunuzda multimedya dil laboratuvar kullanımına ne şekilde destek veriyorsunuz?)
- 4) What factors influenced you to promote the use of MLLs?
(Ne gibi etkenler kurumunuzda multimedya dil laboratuvar kullanımını teşvik etmenizde etkili oldu?)
- 5) What are the most common problems EFL teachers face when using MLLs?
(İngilizce öğretmenlerinin multimedya dil laboratuvarlarını kullanırken yaşadıkları en yaygın sorunlar nelerdir?)
- 6) In your opinion, what could be the benefits of MLLs in English teaching settings?
(Sizce, İngilizce öğretiminde multimedya dil laboratuvar kullanımının faydaları nelerdir?)

APPENDIX G: Sample Transcript of Interview

Interviewer: Do you think that the use of technology is necessary for EFL instructors?

Interviewee: If you had asked this question maybe ten years ago, I would have said 'not that necessary'. However, in today's world, I am amazed at the speed of people's getting used to a new technology. As a world citizen, keeping up with the technology is vital. As an EFL teacher, it is much more important to be on the same page with our students in terms of technology. Since our students are so addicted to it, it would be unwise if we try to isolate them from it during their education. So, since they need it, we need it in our teaching too. I believe that if teachers cannot talk the language their students speak, I mean the language of the technology, they might be obsolete in the future.

Interviewer. Ok. Upon what you just said, do you think that EFL instructors in your institution benefit from technology sufficiently?

Interviewee: Compared to other big universities, we may be counted among those small universities, but still we do not see each other so much. So, it is difficult to find out who is doing what. I mean you may not know what is happening in the classroom next to yours. The teacher there might be using very interesting and enjoyable applications such as Kahoot, Edmodo, etc., but you might not be aware of them. Therefore, I initiated the ICT unit at this school in the aim of bringing these applications to the light. Based on what they are doing, I can tell you that we are doing our best in integrating technology in any kind of activity if it is possible. Let

me give you an example. In our portfolio assignments, we make our students prepare their presentations through Prezi, Storybird, and several more websites or tools. Also, in case our students do not know how to use them, our ICT people prepare 'how to' videos for students as well.

Interviewer: So you are happy with having an ICT unit.

Interviewee: Yes, very much indeed.

Interviewer: Speaking of technological tools, how do you support the use of multimedia language labs (MLLs) in your institution?

Interviewee: We have had those labs for a couple of years. Actually, at first it did not make any sense to me to install them in our building because we already had two labs at that time. The CoHE wanted us to send two instructors to a training in Ankara as far as I can remember. Actually thanks to these colleagues, we became aware of them. I mean, they worked on these labs so much to find a way to work them out. As for what contribution I made myself, I encouraged our teachers to include MLLs in our syllabus and make them a part of our students' evaluation criterion.