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DİNLEME-ANLAMA YETİSİNE ETKİSİ**

**THE EFFECTS OF SUPPLEMENTARY
COMPUTER ASSISTED LISTENING
INSTRUCTION ON LISTENING
COMPREHENSION ABILITY**

HAKAN ŞENTÜRK
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THE EFFECTS OF SUPPLEMENTARY
COMPUTER ASSISTED LISTENING INSTRUCTION
ON LISTENING COMPREHENSION ABILITY

BY
HAKAN ŞENTÜRK

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ADVISOR
YRD. DOÇ. DR. HANDAN KOPKALLI YAVUZ

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ÖZET

Bu çalışma bilgisayar destekli dinleme-anlama dersinin, dinleme-anlama yetisine olan etkisini araştırmaktadır. Biliyoruz ki teknoloji günden güne gelişmektedir ve sınıflarımızda yerini almaktadır. Bu teknolojilerden birisi bilgisayardır. Bilgisayar destekli eğitim veya BDE bu günlerde sıkça duyduğumuz bir terimdir. Bilgisayar destekli dil eğitimin bu günlerde dil eğitimindeki etkililiği de tartışılmaktadır. Hala bilgisayar destekli dil eğitimi ile ilgili yeterince deneysel çalışma yapılmamıştır ve bu yüzden de etkililiği tam olarak bilinmemektedir. Bu nedenden dolayı, bu deneysel çalışma, bilgisayar destekli dil eğitimin, İngilizce dinleme-anlama yetisine olan etkisini incelemektedir.

Bu çalışma Anadolu Üniversitesi İletişim Bilimleri Fakültesi ve Eğitim Fakültesi İngilizce Hazırlık programında gerçekleşmiştir. Çalışmaya toplam 40 öğrenci katılmıştır. Bu 40 öğrenci iki gruba ayrılmıştır; deneysel grup (bilgisayar destekli grup) ve kontrol grubu (geleneksel eğitim grubu). Her iki grup ders programları doğrultusunda dinleme-anlama dersi almıştır. Ek ders olarak deneysel grup, bilgisayar laboratuvarında 20 saat bilgisayar destekli dinleme-anlama dersi almıştır. Kontrol grubu ise yine ek ders olarak sınıf içinde geleneksel şekilde 20 saat dinleme-anlama dersi almıştır. Derslerinin içeriği bilgisayar programının kitap haline getirelerek, bilgisayar destekli grubun ders içeriği ile aynı tutulmuştur. Bu durumda iki grup arasındaki fark, öğrenme araçlarıdır. Her iki grup bir öntest ve bir sontest almıştır. Ayrıca çalışmanın sonunda bilgisayar destekli grup, bilgisayara karşı tutumlarını ölçen bir anket almıştır.

Çalışmanın sonuçlarına göre, deney sonunda iki grup arasında anlamlı fark yoktur. Sadece TOEFL bölümünde kontrol grubu anlamlı bir gelişme sağlamıştır. Bilgisayara karşı tutum anketinin sonuçlarına göre öğrenciler bilgisayar destekli eğitime karşı pozitif bir tutumları olduğu ortaya çıkmıştır.

En önemli bulgu ise deneysel grubun öntest ve sontest'i karşılaştırıldığında, testler arasında anlamlı bir fark olduğudur. Fakat bu fark,

kontrol grubunda yoktu. Yani deneysel grup kendi arasında anlamlı bir gelişme sağlamıştır fakat kontrol grubu bu gelişmeyi sağlayamamıştır.

Sonuç olarak diyebiliriz ki, bilgisayar destekli dinleme-anlama eğitimi geleneksel dinleme anlama dersinden daha üstün bir gelişmeye neden olmamış fakat bilgisayarın öğrencilerin daha hızlı öğrenmelerine yardımcı olduğu gözlenmiştir.

ABSTRACT

This study investigates the effects of supplementary computer assisted listening instruction on listening comprehension ability. We know that day by day technology improves and that we integrate it with our classrooms and sometimes with our instruction. One of this technological improvements is the computer. Computer assisted language learning (CALL) or computer assisted instruction (CAI) are terms used widely these days. The effectiveness of CALL and CAI, however, is still controversial. Experimental studies in the field of CALL and CAI are not enough to claim their effectiveness in language skills. This study was conducted to find out the effectiveness of the computer in the listening classroom.

This study was conducted at Anadolu University Communication Sciences Faculty and Education Faculty's Preparation Program. A total of 40 subjects participated in this study. They were divided into 2 groups: Experimental group (computer assisted group) and control group (traditional group). The experimental group received 20 hours of supplementary computer assisted listening instruction at a computer laboratory. The control group also received 20 hours of traditional supplementary classroom listening instruction. The content of both instructions was the same; the software was transformed into a textbook for the traditional classroom instruction. Thus the only difference between the two groups was the learning medium. Both groups received a pretest and a posttest. An attitude towards computer assisted learning questionnaire was given to the experimental group at the end of the treatment..

The results of the comparison between experimental and control group showed that both groups were similar. The only difference between these groups was in the TOEFL scores; the control group scored significantly higher than the

experimental group. The results of the attitude questionnaire showed that subjects who received computer assisted instruction had positive attitudes towards computer assisted learning.

The most important finding was that when the experimental group's pretest and posttest were compared there was a significant difference between the tests. Computer assisted listening instruction enabled the subjects to progress in a faster pace. This was not valid for traditional classroom listening instruction. There was not such a significant difference in the control group's pretest and posttest.

In conclusion, the results showed that, although one learning medium was not significantly more effective than the other one, computer assisted listening instruction enabled students to improve their listening skills faster than traditional classroom listening instruction.

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CHAPTER I

INTRODUCTION

1.1 Background to the Problem

Listening is the activity of paying attention to and trying to understand the things we hear. As successful listeners, we have to work out what the speakers mean when they speak in particular settings and in particular ways. Understanding the words themselves is not enough to understand spoken text (Underwood, 1989).

Understanding is not something that happens because of what a speaker says; the listener plays a very important part in the process by using different types of knowledge and by combining the knowledge with what he hears and by trying to understand what is spoken (Anderson and Lynch, 1988).

As Underwood (1989) and Anderson and Lynch (1988) point out, listening is a complex process and the teaching of this process is as complex as the listening process itself. For many years there has always been some problems in the teaching of listening comprehension. Listening comprehension is slowly receiving the emphasis it has always deserved. Second language teachers now see it as a crucial skill in second language learning and urge language teachers to spend more time on listening activities (Chastain, 1988). In the past, listening was described as decoding sounds that made up the words in that foreign language. The levels of language structure were totally isolated. This approach derived from the structuralist approach. The teaching methodology consisted of sets of drills, believing that continuous exercise would develop a clearly articulated set of skills, and when these skills are developed, there would be little else to complete about listening comprehension. This approach was based on the behaviouristic tradition (Brown, 1987). Students learned to discriminate sounds

in the second language and studied the differences in sounds of the second language and the similarities in the native language. They also learned the sound system and memorized vocabulary and performed oral drills (Chastain, 1987). There was little attempt to help learners to understand the whole message of spoken English or to make an inference or conclusion from what they had heard. Therefore this method was a parts-to-whole approach and was not really satisfactory in the teaching of listening comprehension (Rixon, 1986). Brown (1987:11) describes the process of teaching listening comprehension in the 1950s and 1960s:

It was, of course, realized that students should not only be exposed to words or sentences pronounced in isolation, they should also be exposed to continuous texts. Courses were produced which included tapes of a passage read aloud where students were required to listen to the tape, a sentence at a time, and to write down the series of English words and sentences that they heard. A later variant on the standard dictation exercise was to construct a "situationalised" conversational dialogue between two people - a traveler and a customs officer, a tourist and a policeman, a husband and wife having breakfast together - where the actors playing the parts of the conversationalists would read their parts slowly and clearly, carefully pronouncing all their consonants. Students would then answer questions about the content of the text they had just heard. If they had difficulty in remembering what they had heard, the text was played again, and, if necessary, again.

Now we know that listening comprehension is a complex process and that it is the central of all learning. According to Feyten (1991), more than 45 percent of our communication time is spent in listening. This enlightening in the importance of listening comprehension has also led to new approaches to the teaching of listening comprehension. It was understood that listening should be treated in context and that a whole-to-parts approach (from contextualized listening to individual sounds of the language) should be considered in the teaching of listening comprehension (Rixon, 1986). Later when communicative language teaching became popular, it was realized that listening should also be

dealt within a “real life” frame; focus should be on meaning and not on form. It was emphasized that language is for communication, that we have to teach listening comprehension in a communicative way. Authentic material was used for the teaching of listening comprehension and it was accepted as useful data for classroom work (Rost, 1990). Also Sheerin (1987) points out that teaching listening comprehension is not only identifying sounds but also proper preparation, adequate support, and the arrangement of appropriate tasks. She adds that the diagnosis of error patterns, giving positive feedback and remedial action are also the necessary components in teaching listening comprehension..

Brown (1987) points out the fact that listening comprehension should be understood better in terms of the problems students have in listening comprehension and that the key for it lies in the hands of the teachers:

We are changing our fundamental assumptions about the ways language works and the way communication takes place. In many ways this paradigm shift puts a greater burden on teachers. If students' problems in listening comprehension do not arise from difficulties in decoding the signal, where do they arise? We are already beginning to supply some of the answers to that question and, I believe, in the next few years we shall have an even better understanding. It is always encouraging to see signs of progress in any sphere: in our understanding of listening comprehension we do see signs of progress.

Brown (1987:15)

Feyten (1991) states that if listening is essential to language acquisition then more attention needs to be paid to the skills needed for effective listening and to the nature of listening. The skills needed for effective listening can be summarized as: *predicting, listening for specific information, listening for general understanding, inferring opinion and attitude, getting meaning from context, recognizing function and discourse patterns and markers, and listening for communicative purposes* (Harmer, 1983, Rixon, 1986, Richards, 1983). Three of these skills can be the key for success in listening comprehension ability and

play a big role in the teaching and learning of listening comprehension. These skills are:

1. Listening for general understanding

This skill includes the ability to “get the general picture”. Listening for general understanding is concerned with rapidly catching the main points of a text and not paying attention to irrelevant information or detail. The ability to discard redundant, irrelevant or over-detailed information when listening is a very important skill (Harmer, 1983).

2. Listening to extract specific information

This skill is the ability to get information one wants and only to focus on that detail. For example, the listener may turn on the radio and listen to a particular information in the news. In this case the listener will disregard everything except the information he/she needs (Harmer, 1983).

3. Listening for communicative tasks

This skill is the competence to fulfill communicative tasks. For example, taking down a telephone message according to a telephone conversation they hear, or, filling in application forms by listening to conversations, or, understanding directions or locations and following them on maps are communicative tasks (Harmer, 1983).

1.1.1 Problems Involved in the Teaching of Listening Comprehension

There are some factors in teaching of listening comprehension which can make listening comprehension much more effective if language teachers would give more attention to them. These factors are individual differences, visual input and feedback.

Individual Differences: As we know every individual has a different learning pace. This is connected with the individuals previous language experience. According to Rivers (1968), students at different language levels will understand the spoken material in different ways. She indicates that some students are disorganized while studying, others are overcautious and spend too

much time on each section while others are overconfident and feel they know it all. She also adds that learning differences in the classroom will cause the learners to panic and therefore decrease their ability to discriminate sounds and word groupings. The importance of these differences has been recognized in language learning and was the main reason for the thrust towards individual instruction in the United States in the 1970s. Some learners, learn more quickly than others, and even though some strategies can be suggested to learners who are slow, still learning differences are likely to remain (Dickinson, 1987). Wright (1987) shares the same opinion and states that even if we try to establish group norms the learner always remains an individual and this individual will have personal differences. This situation creates problems in the listening classroom since there is only one tape and every student has to follow that instruction even if it is too fast for one group or too slow for the other group. Abbott and Wingard (1981) add that in recent years there has been much discussion and studies concerning the individualization of instruction. They also state that it is obvious that learners differ in their interests, their speed of learning and their ways of using strategies. Therefore methods have to be found to minimize the negative effects which are based on individual differences in the classroom.

Visual Input: Another important issue in listening comprehension is the visual input. Visual input is very important in listening because real life listening is always supported by visual clues. According to Anderson and Lynch (1988), listeners benefit from help of visual supported material that is designed to help them interpret what they hear. Ur (1984) states that it is difficult to concentrate on spoken material that is heard "blind". She adds that if something is colorful, humorous, dramatic or in motion, it is better because striking and stimulating visual aids are likely to increase students' motivation and concentration. Also Chastain (1988:284) emphasizes the importance of visual input in listening comprehension:

Teachers should strive from the first day of class to make input comprehensible through the use of visuals and actions. Mueller (1980) found that the use of contextual visuals improves listening comprehension for less proficient students and concluded that visuals serve as advance organizers, enhance students' ability to formulate correct hypotheses, and increase students' interest, thereby causing them to pay closer attention.

Videos and television also help us maintain the necessary visual input needed in the listening classroom. Abbott and Wingard (1981) state that television, film, video-tape are extremely good for creating motivation, providing spoken language practice in interesting situations and showing the student language data outside the classroom experience. Also Dunkel (1986) states that audio and video tape can be used to develop metacognitive skills such as note-taking and outlining in tandem with listening comprehension. She adds that video tape is "perhaps a more suitable medium for instructional delivery". As a result we can say that visual input is crucial in listening comprehension.

Positive feedback: Feedback is an explicit highlighting of what has been learned or what is being learned, and potentially usage of what has been learned (Rost, 1990). Feedback plays a great amount in teaching listening comprehension. Feedback must be immediate and it must focus on the meaning of the text. We can delay immediate feedback in reading and writing because the input is in their hands and we can always refer back to the error or the place where the feedback is necessary but it is not the same for listening. Ur (1984) describes the importance of feedback: "The student's results need to be checked immediately after he has finished, when what he has heard is still echoing somewhere in his mind and there is still a possibility of hearing it again."

Another factor involved as well is that students want to know the correct answer immediately after they have done a task, are frustrated if it is delayed, and may very well lose some of their interest by the time it does appear. Dunkel

(1986) states that teachers should give feedback on listener performance to help learners in checking their comprehension of the received input. She adds that feedback should be given as promptly as possible and the listening check should be predominantly listening based. Emphasizing the need for feedback, Dickinson (1987) states that students need to know why they are wrong, where they went wrong and they need to know how to get the right answer. Also Underwood (1989:73) states that feedback in listening should be immediate;

Whatever activities are chosen, it is important to provide immediate feedback on whether, and to what extent, the students have succeeded in the tasks, and why or why not. It is extremely difficult to provide useful feedback in later lesson, as it is generally necessary to replay, or respeak, the listening text in order to refer to the salient points and it is very hard to rekindle interest in a 'past' topic or text. In addition, much of the value in discussing why students have missed things or made errors is lost if the discussion is not held immediately, while relevant thoughts are uppermost in everyone's mind.

Sheerin (1987) also believes that positive feedback is important in the teaching of listening comprehension and she adds that providing positive feedback for learners means that they know if they are experiencing success or failure. But the chief argument is certainly the pedagogic one: the learning value of listening exercises is increased if there is immediate teacher-feedback on student performance.

We can summarize that providing feedback plays an important role in listening comprehension.

We have looked at some factors which effect teaching and learning listening comprehension. According to experiences, the negligence of these factors causes problems in effective learning of listening comprehension. Therefore we have to find ways to minimize the effects of misusing or neglecting these factors in the listening classroom. Ways to minimize the effects of misusing

or neglecting these factors, may lie in the usage of computers in listening instruction.

1.1.2 Listening Comprehension and the Use of Computers

Forty years ago, computers were as big as houses. Experts were required to operate these machines and they were extremely expensive. Nowadays computers are in the homes of every kind of people from different social and economical statues. Computers now fit on our desks and they are relatively cheap. It is a fact that computers are becoming a part of our daily life (Hope, Taylor and Pusack, 1984).

Computer assisted language learning (CALL) and computer assisted instruction (CAI) became popular in the late 1960s and at the beginning of the 1970s. The fast development of computer technology and linguists and literary researchers interests to computers introduced the computer to language learning and teaching. As a result the 1960s and 1970s witnessed the evolution in CALL (Ahmad, Corbett, Rogers, Sussex, 1985; Dhaif, 1989). The 1980s have witnessed the spread of computers both in educational institutions and people's homes.

Since the beginning of the '80s computers have also found their way into many primary schools. This has been the result of two factors, namely, that computers and computing time have become cheaper, and that many new and less complicated computers have been developed. CALL packages have also become more readily available on the market. The computer laboratory has become an integral component of foreign-language-learning programs in most educational institutions.

Dhaif (1989:17)

Computers seem to be an attractive helper in our classrooms and they have their own advantages. Since technology improves very fast and computers get cheaper day by day, we can easily see them in our schools. CALL (Computer Assisted Language Learning) and CAI (Computer Assisted Instruction) are nowadays widely used in the language classroom. CAI (Computer Assisted

Instruction) is the term used to describe computer programs designed for teaching. When we use the term CAI, we look from the point of view of the computer and how it presents its material. CALL (Computer Assisted Language Learning) is the term for different forms of L2 instruction accomplished with the use of the computer. For example, using a word processor (which is not really designed for language learning) to teach language skills would come under the term CALL not CAI (McGreal, 1988).

As we have seen, individual differences, visual input and feedback play a great deal in listening comprehension. According to Ahmad, Corbett, Rogers and Sussex, (1985), a computer can combine all of these above mentioned factors and present them in one machine. Many teachers can report that they had to replay the passages to one or two students because they still could not understand what was said. This causes the other students to lose concentration and they start to get interested with other things in the class. Therefore individualized instruction is nearly impossible in a listening class. The students cannot listen to a text several times and they cannot stop the text when they want to. In front of a computer the learner is on his/her own and can listen to the text several times and also can stop the text whenever he/she wants and replay the parts in which he/she has difficulties in understanding. In overcoming the problem of individual differences Ahmad et al (1985) state that "for all practical purposes, each student has the computer's full attention and can work at the speed best suited for the individual". McGreal (1988) points out that the computer is well built for providing individual attention to the learner and because of the capacity for personal interaction with students, it can provide more humane instruction than can a teacher in crowded classrooms.

In presenting visual data Ahmad et al (1985) indicate that the computer presents several aspects of particular promises, among these is its versatility in handling different kinds of material in the form of text, graphics, audio and video. They also emphasize that private practice facility provided by the computer differs from book exercises and language laboratories in that it is

responsive to the individual learner and has the capacity to assess responses and act accordingly, in other words, it is interactive. Also the immediate feedback is provided by the computer,

Each student response receives a reply from the computer, virtually instantaneously, with appropriate feedback in the form of comments, assessment and guidance. ... The learner is corrected the first time a mistake is made. The rest of the exercise, rather than perpetuating the error, can serve to practice the correct version.

Ahmad et al (1985:6)

We should not forget the fact that when we say computer assisted language learning we use the word "assisted". Computers should "assist" our teaching and should not be considered as a main teaching device which will replace classroom instruction. We should consider technology as a useful and effective "helper" in our language teaching process and not as a substitute for regular classroom learning (Shrum and Glisan, 1994).

So we can suggest that computer assisted language instruction could be a very useful approach in helping for the teaching and learning of listening comprehension.

1.1.3 Advantages of CALL and CAI

Before conducting this study we had to assume that computer assisted language learning has advantages in the language classroom so that we can say that computer can be effective in the language classroom. What are these advantages of using CALL? According to Dhaif (1989), there are four main advantages:

1. Computers make language conditions more interesting and instruct language through games and problem solving activities. As a result, even difficult drills can become more attractive activities to the student.

2. They give immediate feedback and force self-correction. The learner has always access to the material which is adaptable to the learner's level.
3. The computer can present unlimited types of activities in language teaching.
4. CALL also gives the student learning a language the opportunity to develop general computer literacy which he will be able to use in further career prospects.

Other advantages are mentioned by Chapel and Jamieson (1986). According to them there are three instructional ideals which make it reasonable to let students practice language on the computer:

- 1) Individualization: Learner has the chance to work with the instructed language on his/her own. Poor students can catch up by using the computer outside of the classroom hours and the teachers do not have to slow down the class.
- 2) Record keeping: The computer has the opportunity to collect the data which flows between the student and the computer while interacting. This data can be important for further data analysis. For example the students' answers can be collected and analyzed to improve the program's error diagnosis and remediation.
- 3) Answer judging: Answer judging comes after the computer has asked a question and the student has answered it. The computer should give information about the correctness of the answer and give meaningful explanation about why the answer is wrong.

Ahmad et al (1985) divide the advantages of CALL into three categories:

- a) The benefits of the computer and its nature, b) the benefits for the teacher and c) the benefits for the learner. The benefits of the computer's nature are:

It can handle a much wider range of activities, and much more powerfully, than other technological aids. More than just this, the computer can offer interactive learning. This means that it can conduct a two-way learning session with the student. It is much more than a mere programmed textbook, whose powers of interaction are virtually limited to an ability to reveal the correct answer: the computer can 'assess' the student's response. It can also display messages, take the student through subsequent attempts of a question, and even take the student to a different section of the package, depending on the nature of the response. The computer can do all this very quickly - its response is practically instantaneous.

Ahmad et al (1985:4)

The most important benefit from the point of the teacher is that the computer can handle different kinds of media in one machine: It can present information in the form of text, graphics, audio and video. Also the teacher has always the chance to modify computer exercise which he can not do with a textbook. The most important benefit for the learner is that the student has access. This means that the computer's flexibility of time allows the learner the choice when to study and what to study. This factor makes courses accessible for students who would otherwise have no chance to take them (Ahmad et al, 1985).

Hope, Taylor and Pusack (1984:3) mention the advantages of CALL. They state that:

The computer allows one-to-one interaction. The amount of control over events is shared fairly equally between student and machine: the computer asks the question and has the answer; the student decides when to turn it on and off, which material to work on, and how fast to go. Students have rarely such power over their teachers. Teachers rarely seem as patient.

Hope, Taylor and Pusack (1984) state that the computer shares another quality with good teachers: it keeps careful records and performs correction tasks.

Van Der Linden (1993) indicates the advantages of CALL by highlighting the importance of feedback in the classroom and the implications in CALL. She states that little attention has been paid for the importance of feedback in the foreign language classroom. She adds that corrective feedback is provided in the classroom but that it is not systematic or immediate. She emphasizes that in computer assisted instruction:

- feedback is provided for every incorrect response
- it is given immediate
- self-correction by the learner is required

Also Nagata (1993) mentions that when we compare computer assisted language instruction with the textbook and workbook, a CALL program can provide immediate feedback on the correctness of the learner's response.

Finnegan and Sinatra (1991) indicate the different advantages computer programs possess. They state that some programs allow for instruction to different ability levels, so students are not dependent upon a teacher or tutor to check their work before they continue. Other programs provide correct answers to prevent frustration while others do not go on unless the right answer is given. In both cases the learner is prevented to proceed with wrong information and incorrect assumptions. They add that this is an extremely valuable feature since it prevents the reinforcement of misconceptions.

According to Jones (1983:249-250) computers have many possible applications:

"Computer assisted test and practice exercises present an important development in language teaching. They can provide practice in English - which means that they can teach as well as test. Because of its ability to provide students with individual and instant feedback, the computer as tester is potentially an invaluable aid to teachers: it can relieve them of the burden of constant remedial work, and of the unenviable task of trying to make such work interesting and motivating, thus releasing them for more creative and enjoyable whole class activities.

As we have seen in the above section, computer assisted language learning and instruction has many advantages and these advantages can be very useful in the teaching of foreign languages.

Still we can say that experimental studies investigating the effectiveness of CALL and CAI are very limited. We have to conduct studies which investigate the effectiveness of CALL and CAI in the four language skills. This study was conducted to investigate the effectiveness of computer assisted language learning in listening comprehension.

1.2. Aim and Scope of the Study

The aim of the study is to determine the effect of supplementary computer assisted listening instruction on general listening comprehension proficiency. Also the effect of supplementary computer assisted listening instruction on three subskills were examined. These subskills were:

1. Listening for communicative purposes
2. Listening for specific information
3. Listening for general understanding.

Also another aim of the study was to determine the students' attitudes towards computer assisted instruction and learning. This was done to find out if the students had positive or negative attitudes towards computer assisted learning. The results of this questionnaire could show us how the attitudes of the students in the computer assisted class effect their performance in computer assisted listening instruction.

There were two reasons why computer assisted listening instruction was chosen to be supplementary for general listening comprehension. The first one was that computer assisted instruction should not be seen as a substitute for traditional classroom instruction. Therefore we have to investigate the effects of supplementary computer assisted listening instruction. The second reason was that the computer assisted material was designed for supplementary listening instruction.

1.3. Research Questions

The following research questions were asked in the study:

1. How do supplementary listening classes in different learning environments (Computer assisted class - Traditional Class) effect the students' general listening comprehension ability?
2. How do these environments (Computer Assisted Class-Traditional Class) effect each of the listening sub-skills?
3. What are the attitudes towards computer assisted instruction in the Computer Assisted Class?

The next chapter presents the review of literature of the related studies conducted in the field of CALL and CAI. Also related issues in listening comprehension are reviewed.

CHAPTER II

REVIEW OF LITERATURE

2.1 Experimental Studies Conducted in the Field of CALL and CAI

Experimental studies investigating the effectiveness of CALL are very limited. The studies mainly focus on writing, grammar, reading, general attitudes against computer assisted learning and effects of computer assisted instruction in other educational subjects. Ford and Ford (1992) state that hypermedia learning materials may often be produced in an atmosphere of untested optimism and that it is sometimes assumed that this kind of instruction is to be effective, without doing any experimental tests of the assumption. As Shrum and Glisan (1994) point out we still do not exactly know whether CALL helps the learner in skills like reading, writing, grammar, vocabulary acquisition or listening comprehension. Therefore we can say that CALL still needs to be studied experimentally, especially in the main four skills. This experimental study was conducted to determine the effectiveness of supplementary computer assisted listening instruction. When we look at similar studies, we see that computer assisted instruction can be effective in the teaching and learning of language skills. Then we can assume that learners could do better in listening comprehension if they were supplemented with instruction from the computer. As there are not many studies conducted in the field of CALL and listening comprehension, we have to look at some other comparative studies which could be helpful in supporting our assumption about the effectiveness of computers and listening comprehension.

A study by Riding and Chambers (1992) was conducted to compare the use of two learning media: CD-ROM and textbook. Riding and Chambers (1992) used 40 19-year old undergraduates as subjects. They were randomly divided

into two groups. Their material was a geography textbook and the CD-ROM version of the book. One group used the textbook and the other used a computer with the CD-ROM version of the book. Both groups were asked 7 questions and they were expected to answer these questions by referring to the material. The questions were divided into four categories: factual, interpretive, comparative and deductive. The results were analyzed in terms of their performance on the questions and the strategy used in attempting to answer the questions. The results indicated that there was little difference between the subjects' scores in the interpretive questions. However, the group using the CD-ROM version performed considerably better on both the factual and deductive categories but less on the comparatives. They state that the reason why the CD-ROM group performed less on the comparative category, could probably be the lack of diagrams in the CD-ROM version of the book. In the actual textbook, diagrams and illustrations were included and the students had the chance to compare the diagrams. In terms of search strategies using the CD-ROM version had the advantage of greater flexibility and the use of a variety of approaches. The textbook group used the index as a search method. As a conclusion the writers state that even in a fairly primitive form the use of CD-ROM is effective in a range of tasks. They add that the findings encourage further consideration of the use of the medium.

Bacig, Evans, and Larmouth, (1991) conducted a study on Computer Assisted Instruction in Critical Thinking and Writing. In this study they wanted to determine if students do better or worse in a program using a pencil-and-paper version of the process/model approach compared with a computer assisted version of the approach. This approach uses traditional essay models to teach students to use particular inductive reasoning processes in their writing. A total of 98 subjects were involved in the study. Samples of students' essays were collected in all freshman composition courses taught at the University of Minnesota, Duluth. The samples from the group which received the computer assisted instruction version of the approach were collected in floppy disk

medium and then the essays were retrieved from the disks. To evaluate the subjects samples, the total number of each type of linguistic markers of comparison and contrast (simple connectors, negatives, negative affixes, comparative and superlative forms, and various lexical items entailing comparison and contrast) were tabulated by using a master list derived from Odell (1977) and augmented by Opack and Perushek (1985). The results showed that the students working with the CAI version did at least as well as, and in some respect, better than the students who worked with the paper-and-pencil version. They conclude that there might be a gain in overall efficiency in the CAI version of the program.

Lowe and Bickel (1993) conducted a small-scale study investigating the effectiveness of CAI in teaching grammar and writing. 27 subjects were involved in the study. In the study two groups were used, a Computer Assisted Class and a Traditional Class. At the beginning of the experiment subjects received a 55 question multiple choice pretest designed to measure students' knowledge of grammar and writing concepts. The computer assisted class received computer assisted instruction while the traditional class received conventional classroom instruction. This treatment lasted for one semester. At the end of the semester both groups received the pretest as the posttest. The results of pre- and posttests of the two groups were compared. The results indicated that students in the computer assisted class scored, on average, 8.1 points better on the 55-question posttest than did students in the traditional class. These results are especially interesting because the average pretest score for the computer assisted group was 1.7 points lower than for the traditional group.

Dunkel (1986) investigated the effectiveness of CALL by reviewing the literature on CALL and relevant experimental studies. Among her findings was that when computers are used, students learn instructional materials at a faster pace. In an evaluation of 30 studies conducted by Orlansky and String (1979; cited in Dunkel, 1986) to investigate the effectiveness of computer managed instruction and computer assisted instruction for military training, Orlansky et al

(1979; cited in Dunkel, 1986) found that computer assisted instruction saved 30% or more of the time learners needed to fulfill the same courses given by traditional instruction. Also she adds that in Kulik and Kulik's (1986; cited in Dunkel, 1986) analysis of college level computer based education studies, it was found that computer based education students required only two-thirds as much instructional time as did students taught with traditional methods.

In another study, Beauvois (1992) investigated the effects of computer assisted classroom discussion. She described how computer assisted classroom discussion provides a unique environment for student-student and student-teacher interaction in an experimental networked laboratory established by the English Department at the University of Texas, Austin. The computer assisted network discussion is done by using a local area network. A local area network (LAN) is a set of computers which are connected together and with which you can communicate by using the keyboard by sending messages to other computers connected to the LAN. She was so impressed by the success of the LAN in a Portuguese class that she decided to experiment using the network to tutor high school students who were having serious trouble in French. In computer assisted discussions, students send messages in their foreign language to other computer users in the lab and start discussions. The teacher can join the discussion and can also observe the discussion on the screen. Beauvois (1992) reports that researches conducted in the using of LAN for classroom discussions reveal important facts for language teaching;

The use of LAN to produce synchronous, real-time discussion show that in this networked computer classroom, typically reticent students, i.e., women, minority students, and anxious or shy learners tend to participate in the discussion more readily and more often than in the regular classroom. The computer does not transmit accent or skin colors, no one is put on the spot to respond, and these elements seem to create a relatively nonthreatening atmosphere in the classroom. ... On the network, the instructor becomes more of a guide and facilitator than a purveyor of right answers.

Beauvois (1992:456)

Beauvois (1992) also adds that computer assisted whole class discussion gives students the courage to read, think and write as they try to keep up with the ongoing conversation scrolling on the screen. She concludes by stating that the experiment of tutoring students with LAN went successfully and that synchronous, real-time networks have the potential to make an impact on language learning and that they fulfill a major criteria that are important when evaluating the effectiveness of computer assisted language learning.

Aşkar, Yavuz, and Köksal (1992) conducted a study on students' perception of computer assisted instruction environment and their attitudes towards computer assisted learning. The subjects were 137 fifth grade students from two private elementary schools. The subjects received computer assisted instruction for one month. To assess the subjects' perceptions and attitudes they used two scales, an attitudes towards CAL scale which was used to assess their attitudes towards computer assisted learning, and a Computer Assisted Instruction Environment Instrument which was used to assess the students' perceptions about the differences between computer assisted instruction and traditional classroom instruction. They concluded that all assessed perceptions of both the computer assisted and traditional environments are in favor of CALL. They added that students reported developments in concentration and self-evaluation while working in a computer assisted environment. According to Aşkar et al (1992), the results of the study can be summarized in one sentence: "CAI is a better and more comfortable way of learning than are traditional methods".

Abouserie, Moss and Barasi (1992) also conducted a study measuring cognitive style, gender, attitudes toward computer assisted learning and academic achievement. The subjects were 143 first year medical students enrolled on a physiology course at the University of Wales College of Cardiff. Their computer assisted instruction consisted of nine computer tutorial packages which covered all of the basic course content. The procedure lasted for one academic year. A

Group Embedded Figures Test and an attitude questionnaire were given to the subjects to measure their cognitive style and attitudes towards computer assisted learning. Their academic achievement was determined by students' scores at the end of the academic year in the physiology courses. The results were that students had positive attitudes towards computer assisted learning, that male students preferred computer assisted learning significantly more than female students and that there was no significant relationship between students' attitudes towards computer assisted learning and their achievement in their course.

2.2 Teaching Listening Comprehension and the Usage of Technology

Listening Comprehension was in touch with technology right from the beginning of the teaching of the skill. In 1972, the University of Michigan Press published the first ESL listening textbook and audio tapes for the teaching of listening (Works, N. M., 1985). To use this material in class they needed a tape-recorder. Works (1985) states that by the late 1970s there had been an enormous increase in audio and video tapes. This time also the video got into the classroom to assist the teaching of listening comprehension. Underwood (1989) points out that the video helps teachers to point out the visual clues which help students to understand what they hear. She adds that for listening practice, video combines most of the advantages of using tape recordings with the main advantage of "live" presentation, in other words, the speaker and the immediate context can be seen.

In the teaching of listening comprehension in foreign language environments, technology is very important because students have to come face to face with native spoken language data. Teachers can bring this language data into the classroom only with the help of technology which is, in the case of listening comprehension, tape-recorders and videos. According to Du 1986 (1986), instructors can bring L2 students into contact with a wide range of 1 in the shape of audio and videotapes that are systematically prese

help to enable the “discovery process” and the use of cognitive strategies to increase listening comprehension.

Also Ahmad, Corbett, Rogers and Sussex, (1985), suggest that computer can be used in listening comprehension. They state that cassette recorders are slow-speed devices for storing and retrieving data. In other words, to find a particular text on a tape you have to wound it and finding the wanted listening text takes time. But on a computer disk you can retrieve the text from any part of the disk. This means, the moment you give the retrieve command to the computer the wanted section or text is available. This has numerous advantages for the listening class.

As we mentioned before, the computer can combine audio and video and present both media in one machine. According to Hope, Taylor and Pusack (1984:48);

By using additional technologies, we can find fascinating ways to give students much more realistic exposure to the target language. The limitations of the audio language lab are gradually being overcome as the computer makes listening and viewing more interactive. The attraction of using these additional media lies in their potential to overcome the somewhat sterile feeling of computerized drill and to confront the student with authentic samples of language and culture.

Related studies show us that computer assisted instruction may be effective in the language classroom. We can also say that the listening comprehension needs technology in the classroom and that it can add many effective advantages to our instruction. Therefore the effects of computer assisted instruction on listening comprehension ability have to be investigated to determine if these positive effects and advantages of computer assisted instruction are really relevant in our listening classrooms.

The next chapter presents the methodology of the study.

CHAPTER III

METHODOLOGY

3.1 Subjects

Subjects consisted of 40 elementary level University students (between the ages 18-20) from Anadolu University's English Language Preparation program of the Communication Sciences Faculty and Education Faculty. The reason why elementary level students were used in this study was that when we investigate success in language learning in experimental studies, using subjects which had less exposure to the language is more appropriate for the validity of the study.

The subjects were chosen according to the results of the placement test which they took at the beginning of the 1996-97 semester. Their score range from this placement test was 0-4 points. The same placement test was given before the study (beginning of the second semester) to determine whether these groups of students still formed a homogenous group. The results of the second placement test indicated that the two groups still formed a homogenous group although their scores had increased. Their score range was 19-26 points.

The subjects were divided into two groups: Experimental group (Computer Assisted Class) and control group (Traditional Class).

3.1.1 Experimental Group (Computer Assisted Class)

The experimental group (Computer Assisted Class) consisted of 20 students. They received computer assisted instruction in a computer laboratory.

3.1.2. Control Group (Traditional Class)

The control group (Traditional Class) also consisted of 20 students. They received instruction in a traditional classroom environment.

3.2 Material

3.2.1. Regular Listening Material

The Preparation program allocates 4 hours of listening instruction per week. These 4 hours were divided into two as follows: 2 hours of regular in-class listening instruction and 2 hours of supplementary listening instruction. In the two hours of supplementary listening instruction, the experimental group received listening instruction in a computer assisted environment. The control group, on the other hand, received listening instruction in the classroom.

In the regular 2 hours of listening instruction the material was designed according to the listening curriculum of the preparation program.

3.2.2. Supplementary Listening Material

The supplementary listening material consisted of a listening software which was used by the experimental group while the control group received the same material adapted from the software.

The software the experimental group used were two CD-ROMs called "Listen1" and "Listen2" from *The Language Company*. The content of the two CD-ROMs was taken from Heinemann's listening textbook "*Listen Up*". The software consisted of 20 units.

The control group received the same listening material used by the experimental group. However, it was designed in the form of a text-book and audio tapes. This adaptation was done by capturing the computer units from the screen and printing them, and recording the listening extracts from the computer on to an audio tape.

3.3. Procedure

The experiment lasted for 20 classroom hours. It started at the beginning of the second semester of the preparation program. Before the experiment started, the students were given a pretest to determine their current listening comprehension level. The pretest was designed according to the listening skills students would receive during the study.

After the treatment they received a posttest. The posttest was the same as the pretest to determine if there was any difference in progress in listening comprehension ability..

3.3.1. Computer Assisted Instruction

The experimental group received computer assisted instruction at the computer lab of the Foreign Language Center of the Anadolu University. At the beginning of the treatment, students received a brief tutorial about how to use the computer program. The first interaction with the computer was with a demo program to familiarize students with the use of the mouse and some basic principles of the computer.

The computer assisted instruction started with the first unit of the program. They had to proceed in sequence from the 1st unit to the 20th unit of the computer program. In one class hour (45 minutes) the subjects in the experimental group had to finish one unit. They could not proceed to the next unit before they achieved a certain score from that unit; at least a 90 out of 100. After each unit, the score of a student could be observed by the teacher from the main menu screen of the program. One sample unit is presented in Appendix 1. At the end of the treatment, before the post-test, the experimental group received a questionnaire to determine the students' attitudes towards computer assisted learning. This was done to observe the point of view of the students towards computer assisted learning.

3.3.2. Classroom Instruction

In the classroom the instruction was the same as the regular listening classes in the preparation program. An audio tape was used to present the aural text. The content of the printed and aural text was the same as the content used in the computer program. The lesson consisted of pre-listening and during listening activities. Pre-listening activities consisted of short discussions to elicit background knowledge on the topic. During-listening activities consisted of listening to the actual material and answering related questions.

3.4. Data Collection

3.4.1. Pretest and Posttest

The pretest and posttest (see Appendix 2), the same test administered before and after the treatment, consisted of 6 parts. Each part tested a particular listening sub-skill. In this study, the three listening sub-skills were tested. In the supplementary classes, both in the traditional and computer assisted class, the following skills were practiced and their related tasks were:

1. Listening for general understanding. According to Harmer (1983), putting pictures or main ideas into order are tasks which are practiced to test this skill.

2. Listening to extract specific information. Completing grids and true/false questions which state specific information are tasks related to this skill (Harmer, 1983; Ur, 1984).

3. Listening for communicative purposes. According to Harmer (1983), tasks related to this skill are tasks where students are asked to do something as if they themselves were one of the people they hear talking. This can be filling in application forms or "which picture tasks" (Underwood, 1989).

In the pretest-posttest, these skills were tested by using tasks related to the skills. The distribution of the skills in the pretest-posttest can be summarized as

in the Table 3.1. The given part numbers in the last column of the table show the part numbers in the pre and posttest.

Table 3.1
Distribution of Subskills in the Pretest and Posttest

Listening for general understanding	Putting pictures into order	Part 4
	Putting statements into order	Part 5
Listening to extract specific information	Completing grids	Part 6
	True/False questions based on picture	Part 2
Listening for communicative tasks	Listening to directions	Part 3
	Which picture tasks	Part 1

The pretest-posttest were given to both classes at the same time. The test lasted for approximately 50 minutes. During the test each part was explained and the students were asked if they had any questions about the instruction in a given task. Students were then given time (about three minutes) to read the questions / examine the pictures. After students familiarized themselves with the task, they listened to the text. Students listened to the text twice. After listening the second time, students were given time again (about two minutes) to check their answers. This procedure was repeated for each part of the test.

3.4.2. Practice TOEFL Listening Test

A practice TOEFL listening test (Appendix 4) was also given at the beginning and at the end of the study to the subjects to determine if computer assisted instruction would be effective in the achievement of TOEFL listening. The TOEFL test is considered as a standard test in measuring language proficiency. In this test listening proficiency is also tested. The pretest-posttest given in this study was designed according to the skills they received in their listening classes but the subjects were not familiar with TOEFL type of listening questions. Also they did not receive any TOEFL based listening practice before or during the treatment. Therefore a practice TOEFL listening test was used as a

second independent measurement to evaluate the effectiveness of computer assisted instruction in general listening comprehension ability.

3.4.3. Computer Assisted Instruction Attitude Questionnaire

Before the posttest an attitude questionnaire (Appendix 5) towards computer assisted instruction was given to the experimental group students to determine their attitudes towards computer assisted instruction. This was done to observe computer assisted learning also from the point of the learner and not only by looking at the scores they have achieved in the tests. The results of this questionnaire could be another way of showing us why the subjects in the experimental group (computer assisted class) were successful or not.

This questionnaire was translated into Turkish to avoid any second language based misunderstandings which may lead to false conclusions about the results of the questionnaire. The questionnaire was adapted from Aşkar et al's (1992) study about the perceptions and attitudes of students' toward computer assisted instruction. It consisted of ten questions designed to reveal students' attitudes towards computer assisted learning. Each question had three alternatives; yes, sometimes or no.

3.5. Data Analysis

Before the treatment, the total pretest scores of both the control group and experimental group were compared to determine if there were any significant differences between the two groups. To do this a t-test for independent samples was used. Also the posttest total scores were calculated by using a t-test for independent samples to determine if there were any significant differences between the two groups after the treatment.

To determine if there was a significant difference within the groups, that is if there was a difference between the pretest and posttest results of each group, a paired t-test (t-test for dependent samples) was used.

Since the pretest-posttest was divided into three listening sub-skills (*Listening for general understanding, Listening to extract specific information, Listening for communicative tasks*) the scores of each skill were compared, to determine whether the environment of supplementary instruction had an effect on the improvement of different skills. The scores achieved from each skill were calculated and later transposed to a 100 points scale. Later the comparison of the subskill scores between groups was done by using a t-test for independent samples. The comparison of the subskill scores within the groups was done by using a t-test for paired samples (t-test for dependent samples).

The results of the questionnaire were analyzed by scoring the answers on a three point response scale: Yes (3), Sometimes (2) and No (1). The scores of each student were calculated and their mean was taken. Later percentages of each respond were calculated. The maximum score to be achieved in the questionnaire was 30. This number was taken to be the criteria which would reflect the students' attitudes toward computer assisted learning.

The next chapter presents the results of the statistical analysis for within and between groups, and the results of the attitude questionnaire.

CHAPTER IV

RESULTS

The aim of this study was to determine if there is an effect of supplementary computer assisted instruction on listening comprehension in general and on its subskills. Therefore the pretest and posttest overall scores were calculated and also the subskills: *listening for communicative purposes*, *listening for specific information* and *listening for general understanding* were calculated. The results of the attitude questionnaire will also be discussed.

4.1 Pretest Results

4.1.1 Overall

The pretest results of the experimental and control group were analyzed by using the t-test for independent samples. This was done to determine if the two groups used in the experiment were similar in terms of their listening comprehension proficiency before the treatment. The overall scores (three subskills combined) of both groups were calculated. As shown in Table 4.1 the mean score of the control group was 58.55 and the mean of the experimental group was 53.88. The t-test calculations did not show a significant difference between groups ($p=0.1828 > \alpha=0.05$). Therefore we can say that both groups' listening comprehension proficiency was similar at the beginning of the treatment.

Table 4.1
Pretest Means for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	58.55			
			4.67	-1.3569	0.1828
Experimental Group	20	53.88			

$\alpha=0.05$

4.1.2 Pretest: *Listening for Communicative Purposes*

Each of the subskills were calculated and compared between the groups. Table 4.2 shows the mean scores for *listening for communicative purposes*. The mean of the control group was 78.46, and the mean of the experimental group was 82.50 with a 4.04 mean difference. This difference was not significant. ($p=0.4483>\alpha=0.05$). The performance of both groups in the subskill of *listening for communicative purposes* was similar.

Table 4.2
Pretest Listening for Communicative Purposes Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	78.46			
			4.04	0.7661	0.4483
Experimental Group	20	82.50			

$\alpha=0.05$

4.1.3 Pretest: *Listening for Specific Information*

Table 4.3 shows the results of the t-test analysis of the subskill *listening for specific information*. The mean of the control group was 47.00 and the mean of the experimental group was 43.81, with a mean difference of 3.19. The t-test analysis indicated that again there was no significant difference between the two

groups ($p=0.3426>\alpha=0.05$). Therefore the two groups were similar in their listening ability in this subskill at the beginning of the treatment.

Table 4.3
Pretest Listening for Specific Information Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	47.00			
			3.19	-0.9610	0.3426
Experimental Group	20	43.81			

$\alpha=0.05$

4.1.4 Pretest: *Listening for General Understanding*

The results of the t-test analysis showed that the two groups were also similar in proficiency level in the subskill *listening for general understanding*. As seen in Table 4.4 the mean of the control group was 56.18 and the mean of the experimental group was 43.97, with a 12.21 mean difference. Although the mean difference seems to be large, there was no significant difference between groups in this subskill ($p=0.9775>\alpha=0.05$).

Table 4.4
Pretest Listening for General Understanding Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	56.18			
			12.21	-1.6977	0.9775
Experimental Group	20	43.97			

$\alpha=0.05$

4.1.5 Pre Practice TOEFL Results

A practice TOEFL test was also given to the subjects to determine if supplementary computer assisted listening instruction would effect the success in

TOEFL listening. Table 4.5 shows the results of the t-test analysis of the pre TOEFL scores.

Table 4.5
Pre TOEFL Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	18	20.78			
			3.22	-1.7235	0.9388
Experimental Group	18	17.56			

$\alpha=0.05$

In Table 4.5 we can see that the mean of the control group was 20.78 and the mean of the experimental group was 17.56. Both groups were similar in proficiency level, that is, there was no significant difference between the groups in the TOEFL test ($p=0.9388>\alpha=0.05$).

4.1.6 Summary of the Pretest

Table 4.6 shows the pretest mean results of the control group and experimental group. As seen in Table 4.6, in both groups, the means scored from the subskill *listening for communicative purposes*, are larger than the means scored from the other two subskills.

Table 4.6
Summary of the Pretest Mean Results
of the Control Group and the Experimental Group

Pretest	Control Group	Experimental Group	Mean Difference
Overall	58.55	53.88	4.67
LCP	78.46	82.50	4.04
LSI	47.00	43.81	3.19
LGU	56.18	43.97	12.21
TOEFL	20.78	17.56	3.22

LCP (Listening for Communicative Purposes)

LSI (Listening for Specific Purposes)

LGU (Listening for General Understanding)

If we compare the mean difference of the *listening for general understanding* mean scores with that of the other two subskills, we can see that the mean difference shown in Table 4.6 is greater than the mean differences in the other two subskills.

The means of each subskill and for the overall (skills combined) are similar for both groups. The results of statistical analysis showed that there was no significant difference between groups. The two groups were at the same level at the beginning of the study.

4.2 Posttest Results

4.2.1. Overall

The posttest total scores were again calculated by using the t-test for independent samples. Table 4.7 shows the results of this analysis.

Table 4.7
Posttest Means for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	61.23			
			4.87	1.2836	0.2070
Experimental Group	20	66.10			

$\alpha=0.05$

As shown in Table 4.7, the mean score of the posttest for the control group was 61.23 and the mean of the experimental group was 66.10. The mean difference was 4.87. The results of the t-test analysis indicate that there is no significant difference between the two groups ($p=0.2070>\alpha=0.05$). This means that the supplementary computer assisted listening instruction did not have significant effect when compared with the instruction given in the traditional classroom environment.

4.2.2 Posttest: *Listening for Communicative Purposes*

As shown in Table 4.8, the mean score for *listening for communicative purposes* of the control group was 92.88, and the mean of the experimental group was 93.85. The mean difference is 0.95. Again according to the t-test analysis, there was no significant difference between the control group and the experimental group ($p=0.7611>\alpha=0.05$).

Table 4.8
Posttest Listening for Communicative Purposes Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	92.88			
			0.97	0.3062	0.7611
Experimental Group	20	93.85			

$\alpha=0.05$

By looking at the results in Table 4.8 we can say that the supplementary computer assisted listening instruction did not have a significant effect on the students' listening ability in the *listening for communicative purposes* subskill.

4.2.3 Posttest: *Listening for Specific Information*

Table 4.9 shows that the mean for *listening for specific information* of the control group was 50.44, and the mean of the experimental group was 52.50. The mean difference was 2.06 with the experimental group having a higher score.

Table 4.9
Posttest Listening for Specific Information Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	50.44			
			2.06	0.5368	0.5946
Experimental Group	20	52.50			

$\alpha=0.05$

The results of statistical analysis indicated that there was no significant difference between the control and the experimental group ($p=0.5946>\alpha=0.05$). This means that supplementary computer assisted listening instruction did not have a significant effect on the students' listening ability in the *listening for specific information* subskill.

4.2.4 Posttest: *Listening for General Understanding*

As indicated in Table 4.10, the mean for *listening for general understanding* of the control group was 49.71, and the mean of the experimental group was 60.59. The mean difference was 10.88 with the experimental group having the higher score. Although the mean difference seems to be large, the results of the t-test analysis indicated no significant difference between the two groups ($p=0.1439>\alpha=0.05$).

Table 4.10
Posttest Listening for General Understanding Means
for Control and Experimental Group

Groups	n	mean	mean difference	t	p
Control Group	20	49.71			
			10.88	1.4921	0.1439
Experimental Group	20	60.59			

$\alpha=0.05$

Table 4.10 indicates that supplementary computer assisted listening instruction did not have a significant effect on the students' listening ability in the *listening for general understanding* subskill.

4.2.5 Post Practice TOEFL Results

Table 4.11 shows the results of the post practice TOEFL. As indicated in Table 4.11 the mean of the control group was 25.00, and the mean of the experimental group was 18.22. The mean difference was 6.78 with the control

We should also consider the results observed in the TOEFL scores. As shown in Table 4.12, the experimental group achieved a larger score in the overall and the subskill means in the posttest. But this was not valid for the TOEFL mean scores. The experimental group achieved a lower score in the post TOEFL test when compared with the post TOEFL mean scores of the control group.

4.3 Pretest and Posttest Results of the Control Group

4.3.1 Overall

As we can see in Table 4.13, the pretest mean score for the control group was 58.55, and the posttest mean score was 61.23. The mean difference was 2.68. According to the results of the t-test analysis, there was no significant difference between the pretest and the posttest for the control group ($p=0.2704>\alpha=0.05$).

Table 4.13
Pretest-Posttest Total Scores
of the Control Group

Tests	n	mean	mean difference	t	p
Pretest	20	58.55	2.68	-1.1353	0.2704
Posttest		61.23			

$\alpha=0.05$

The difference in the pre and posttest total score suggest that there was no significant progress in the control group after the treatment.

4.3.2 Pre and Post *Listening for Communicative Purposes* Results

Table 4.14 shows that the mean for the subskill *listening for communicative purposes* in the pretest was 78.46, and the mean of the subskill in the posttest was 92.88. The mean difference was 14.42 and the subskill score in

the posttest was higher. By looking at the t-test analysis results we can see that there was a significant difference between the subskill scores in the pretest and the posttest ($p=0.0008<\alpha=0.05$).

Table 4.14
Listening for Communicative Purposes Means
of the Control Group

Tests	n	mean	mean difference	t	p
Pretest		78.46			
	20		14.42	-3.9778	0.0008
Posttest		92.88			

$\alpha=0.05$

These results show us that the control group showed a significant progress after the treatment in the subskill *listening for communicative purposes* when compared with the subskill scores in the pretest.

4.3.3 Pre and Post Listening for Specific Information Results

Table 4.15 shows that the mean for the subskill *listening for specific information* in the pretest of the control group was 47.00, and the mean for the subskill in the posttest was 50.44. The mean difference was 3.44.

Table 4.15
Listening for Specific Information Means
of the Control Group

Tests	n	mean	mean difference	t	p
Pretest		47.00			
	20		3.44	-2.0150	0.0582
Posttest		50.44			

$\alpha=0.05$

As shown in Table 4.15, the t-test analysis results indicate that there is no significant difference between the subskill mean scores in the pretest and posttest ($p=0.0582>\alpha=0.05$). In other words the control group showed no significant

progress in the subskill *listening for specific information* after the treatment when compared with the subskill mean scores in the pretest.

4.3.4 Pre and Post *Listening for General Understanding* Results

The results in Table 4.16 show that the mean for the subskill *listening for general understanding* in the pretest was 56.18, and the mean for the subskill in the posttest was 49.71. The mean difference was 6.47 with the posttest score being lower. According to the results of the t-test analysis, there was no significant difference between the subskill mean scores in the pretest and posttest ($p=0.2598>\alpha=0.05$).

Table 4.16
Listening for General Understanding Mean
of the Control Group

Tests	n	mean	mean difference	t	p
Pretest		56.18			
	20		6.47	1.1615	0.2598
Posttest		49.71			

$\alpha=0.05$

The means for the pretest and posttest indicate that the control group's score in the subskill *listening for general understanding* has decreased after the treatment. This was not an expected decrease since the control group scores increased for the other skills.

4.3.5 Comparison of the TOEFL Scores

As it is shown in Table 4.17, the mean for the pre TOEFL test of the control group was 20.78, and the mean of the TOEFL test was 25.00. The mean difference was 4.22 with the post TOEFL test having a higher score. The results of the t-test analysis indicated that there is a significant difference between the pre TOEFL and the post TOEFL test ($p=0.0314<\alpha=0.05$). This suggests that the

control group showed progress in the TOEFL listening test after the given treatment. We can also say that the traditional listening instruction given in the classroom effected the listening ability for the achievement in the post TOEFL test.

Table 4.17
Pre and Post TOEFL Means
of the Control Group

Tests	n	mean	mean difference	t	p
Pre TOEFL		20.78			
	18		4.22	-2.3460	0.0314
Post TOEFL		25.00			

$\alpha=0.05$

4.3.6 Summary

Table 4.18 shows the summary of the control group pretest and posttest means.

Table 4.18
Summary of the Control Group Pretest and Posttest Means

Control Group	Pretest	Posttest	Mean Difference
Overall	58.55	61.23	2.68
LCP *	78.46	92.88	14.42
LSI	47.00	50.44	3.44
LGU	56.18	49.71	6.47
TOEFL	20.78	25.00	4.22

LCP (Listening for Communicative Purposes)

LSI (Listening for Specific Purposes)

LGU (Listening for General Understanding)

* Statistically Significant

As we can observe in the above table, the mean difference for the *listening for communicative purposes* subskill is larger than the mean differences for the other skills. Also we have to consider the decrease in the mean score of the *listening for general understanding* subskill. There is no obvious reason for this decrease

but we can assume that traditional classroom instruction could have a negative effect on the achievement of this subskill in the posttest.

4.4 Pretest and Posttest Results of the Experimental Group

4.4.1 Overall

As shown in Table 4.19, the mean for the pretest was 53.88, and the mean of the posttest was 66.10. The mean difference was 12.22 and the higher score was achieved in the posttest. According to the results of the t-test for paired samples, there is a significant difference between the pretest and the posttest of the experimental group ($p=0.0000<\alpha=0.05$). In other words, the experimental group showed a significant progress after the treatment.

Table 4.19
Pretest-Posttest Total Means
of the Experimental Group

Tests	n	mean	mean difference	t	p
Pretest		53.88			
	20		12.22	-6.3595	0.0000
Posttest		66.10			
$\alpha=0.05$					

Therefore we can say that supplementary computer assisted listening instruction had a significant effect on the success in the posttest when compared with the pretest scores.

4.4.2 Pre and Post *Listening for Communicative Purposes* Results

Table 4.20 shows the results of the comparison of the pre and post *listening for communicative purposes* scores of the experimental group.

Table 4.20
Listening for Communicative Purposes Means
of the Experimental Group

Tests	n	mean	mean difference	t	p
Pretest		82.50			
	20		11.35	-3.6743	0.0016
Posttest		93.85			

$\alpha=0.05$

The mean for the subskill *listening for communicative purposes* of the pretest was 82.50, and the mean of the posttest was 93.85. The mean difference was 11.35. As indicated in Table 4.20, there was a significant difference between the pre and the post subskill scores ($p=0.0016<\alpha=0.05$). This means that the experimental group showed a significant progress in the post subskill scores.

4.4.3 Pre and Post *Listening for Specific Information* Results

As shown in Table 4.21, the mean for the subskill *listening for specific information* in the pretest was 43.81, and the mean of the subskill in the posttest was 52.50. The mean difference was 8.69. The score in the posttest is higher and according to the results of the t-test analysis, there was a significant difference between the pre subskill and post subskill scores ($p=0.0009<\alpha=0.05$).

Table 4.21
Listening for Specific Information Means
of the Experimental Group

Tests	n	mean	mean difference	t	p
Pretest		43.81			
	20		8.69	-3.9258	0.0009
Posttest		52.50			

$\alpha=0.05$

Based on the results of the t-test we can conclude that the experimental group showed a significant progress in the *listening for specific information* subskill after the treatment.

4.4.4 Pre and Post *Listening for General Understanding* Results

As it is shown in Table 4.22, the mean for the subskill *listening for general understanding* in the pretest was 49.97, and the mean for the subskill in the posttest was 60.59. The mean difference was 10.62 with the posttest having a higher score.

Table 4.22
Listening for General Understanding Means
of the Experimental Group

Tests	n	mean	mean difference	t	p
Pretest		49.97			
	20		10.62	-3.0286	0.0069
Posttest		60.59			

$\alpha=0.05$

The results of the t-test analysis indicated that there was a significant difference between the pre and post *listening for general understanding* scores ($p=0.0069 < \alpha=0.05$). This means that the experimental group scored a significantly better score in the posttest after the given treatment.

4.4.5 Comparison of Practice TOEFL Scores

Table 4.23 shows the results of the t-test for the practice TOEFL scores in the experimental group.

Table 4.23
Pre and Post TOEFL Means
of the Experimental Group

Tests	n	mean	mean difference	t	p
Pre TOEFL		14.33			
	18		3.89	-1.5809	0.1323
Post TOEFL		18.22			

$\alpha=0.05$

The mean of the pre TOEFL test was 14.33, and the mean of the post TOEFL test was 18.22. The mean difference was 3.89 with the post TOEFL test having a higher score. When we look at the results of the t-test analysis we see that there was no significant difference between the pre and post TOEFL scores of the experimental group ($p=0.1323>\alpha=0.05$). This means that the supplementary computer assisted listening instruction had no significant effect on the achievement in the TOEFL test.

4.4.6 Summary

Table 4.24 shows the summary of the experimental group pretest and posttest means.

Table 4.24
Summary of the Experimental Group Pretest and Posttest Means

Experimental Group	Pretest	Posttest	Mean Difference
Overall *	53.88	66.10	12.22
LCP *	82.50	93.85	11.35
LSI *	43.84	52.50	8.69
LGU *	49.97	60.59	10.62
TOEFL	14.33	18.22	3.89

LCP (Listening for Communicative Purposes)

LSI (Listening for Specific Purposes)

LGU (Listening for General Understanding)

* Statistically Significant

As seen in the above table the experimental group scored higher in the posttest. The differences for overall and individual subskills was significant. It was

interesting, however, that although the mean scores increased significantly for each subskill as well as for overall, the increase in the TOEFL was minimal.

4.5 Results of Attitude Questionnaire of the Experimental Group

An attitude questionnaire was given to the experimental group (computer assisted class) to determine the attitudes of the subjects towards computer assisted learning. The maximum score to be achieved in this questionnaire was 30. The collected scores were later transposed to a 100 percent point scale..

The mean of the questionnaire was 26.79. When we consider the maximum score of 30, which resembles a positive attitude towards computer assisted learning, then we can say that the experimental group showed a positive attitude.

Table 4.25 shows the percentages of the responds given to each question in the questionnaire.

Table 4.25
Computer Assisted Learning Scale, with Percentages of Responds

Attitude Scale Item	Yes (%)	Sometimes (%)	No (%)
1. While studying with computers, the time passes quickly.	83.33	16.67	0.00
2. I learn quickly while studying with computers.	70.83	25.00	4.17
3. I feel uncomfortable while studying with computers.	0.00	16.67	83.33
4. Learning with computers increases my success.	66.67	25.00	8.33
5. Learning from computers increases my confidence.	66.67	16.67	16.67
6. Computers make me eager to study more.	62.50	25.00	12.50
7. At first, learning with computers seems enjoyable but later I'm bored.	4.17	20.83	75.00
8. Instruction with computers is very enjoyable.	83.33	16.67	0.00
9. I would like to learn all the courses with computers.	70.83	16.67	12.50
10. I learn easily with colorful graphics and animation.	83.33	8.33	8.33

Mean=26.79, Sd=2.54, Max=30

Table 4.25 also shows that none the students answered "no" to question 1 in the questionnaire. This means that none of the students think that the time does not pass quickly while studying with the computer. Also the same was valid for question 3. None of the students answered "yes" to question 3. This means that

they do not feel uncomfortable while studying with the computer. Also in question 9, none of the students think that instruction with computer was not enjoyable.

4.6 Summary of Results

Table 4.26 presents the summary mean results of control and experimental groups' overall, subskills and practice TOEFL scores.

Table 4.26

Summary Mean Results of Control and Experimental Groups'
Overall, Subskills and Practice TOEFL Scores

Groups	Pre-Post Tests		Communc. Pur.		Specific Inf.		General Und.		TOEFL	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Control Group	58.6	61.2	78.5	92.9*	47.0	50.4	56.2	49.7	20.8	25.0**
Experimental Group	53.9	66.1*	82.5	93.8*	43.8	52.5*	44.0	60.6*	17.6	18.2

* significant difference within group

** significant difference between groups

As seen in Table 4.26 , the experimental group showed significant progress due to treatment. This was true for all three subskills as well as for the overall results. But the experimental group did not show significant progress in the practice TOEFL tests.

The control group showed no significant progress after the study when their overall pretest and posttest mean scores are compared. The same could be said for the subskills except the *listening for communicative purposes* subskill. In this subskill the control group showed significant progress after the study.

Another fact is that there was no significant difference between the groups when their pretests and posttests are compared. This means that computer assisted listening instruction was not effective when compared with traditional classroom listening instruction. The only significant difference between the groups was in the TOEFL test. There was no significant difference between the groups in the pre TOEFL test but after the treatment the control group showed a

significant difference with the experimental group in the post TOEFL test. This means that traditional classroom instruction was more effective in the achievement in the TOEFL listening test than computer assisted listening instruction.

CHAPTER V

DISCUSSION

The aim of this study was to determine whether supplementary computer assisted listening instruction had an effect on general listening comprehension proficiency and its subskills -*listening for communicative purposes*, *listening for specific information* and *listening for general understanding*. Also another aim of the study was to evaluate the students' attitudes towards computer assisted learning.

The overall results of the pretest (including overall pretest scores with subskills combined, *listening for communicative purposes* scores, *listening for specific information* scores and *listening for general understanding* scores) showed that the control group and the experimental group were equal and that there was no significant difference between the groups. The pretest mean scores of the control group in the overall pretest, in the subskills *listening for specific information*, *listening for general understanding* and in the TOEFL, were higher than the experimental group (cf. Table 4.6). The mean score for the subskill *listening for communicative purposes* (cf. Table 4.2) was higher for the experimental group than the control group. Statistical analysis, however, showed that this difference in the mean scores was not significant.

In the pretest results, we can see that the mean score of the subskill *listening for communicative purposes* (cf. Table 4.6) was much higher than the other mean scores. The reason for the high score in the subskill *listening for communicative purposes* may be the tasks which were tested in this subskill part of the pretest. These tasks were describing people and giving/taking directions. The subjects involved in this study had some background knowledge on these

tasks. We should consider the other language lessons that the subjects had in their regular preparation classes. The topics mentioned above were also dealt with in their speaking classes. Therefore we can expect a higher score in this particular subskill and investigations indicate that background knowledge can effect listening comprehension ability (Rubin, 1994; Samuel's, 1984, Dunkel, 1986).

Another fact revealed in the results of the pretest was that the mean difference in the subskill *listening for general understanding* was larger than the mean differences in the other subskills tested in this study. The mean difference for *listening for specific information* was 3.19 and the mean difference for *listening for communicative purposes* was 4.04. But the mean difference for *listening for general understanding* was 12.21 (cf. Table 4.6). The experimental group received the lower score in this subskill. The explanation for this mean difference may be that tasks involved in the testing of this skill were putting pictures and statements into order and especially putting statements into order was reported by the experimental group to be a difficult task. However statistical analysis showed that there was no significant difference between the groups.

The scores of the pre TOEFL test were low. The subjects had no prior knowledge about TOEFL based tasks and they had not received any TOEFL related listening comprehension training. The skills and task types in their regular listening classes before the treatment had also no relation to TOEFL based listening tasks. These factors can be the reason of these low scores. We also should not forget the elementary language level of the students.

The statistical analysis of the posttest showed us the final findings of this study. In the total posttest mean score the experimental group scored a higher score than the control group (cf. Table 4.7). Still this was not enough to say that the computer assisted treatment given to the experimental group created a significant difference between the groups. In other words, supplementary computer assisted listening instruction did not effect general listening comprehension proficiency when compared with traditional classroom

instruction. This result can be repeated with the subskills which were also taken into account in this study. When we compare both groups' mean scores for the subskills we can see that the experimental group scored a higher score. We can say that supplementary computer assisted listening instruction did not create an effect on the subskills tested in this study when compared with the group which received traditional classroom listening instruction.

As it was mentioned before the control group scored a higher score in the *listening for general understanding* subskill in the pretest. The mean difference was 12.21. But in the posttest, this time, the experimental group scored a higher score in this subskill and the mean difference was 10.88 (cf. Table 4.12). This finding is similar with Lowe and Bickel's (1993) findings. They reported that at the beginning of the study the computer assisted group's pretest score was lower than the traditional group. But after their experiment the computer assisted group scored a higher score in the posttest. Also Dunkel (1987) reports that when computers are used in language instruction than learning pace is faster. In our case, we can say that the computer assisted environment effected the experimental group's learning pace in a positive manner. In other words, computer assisted listening instruction effected the learning pace of the experimental group in a large account while traditional listening instruction did not effect the learning pace of the control group in a that large account. Still with a mean difference of 10.88, the statistical analysis showed that there was no significant difference between groups.

There were no significant differences between the group's overall posttest mean scores and subskill mean scores but the same was not valid for the post TOEFL results. It was interesting to observe that the experimental group scored a greater score in the overall posttest and in all the subskills, but not in the post TOEFL test. The reason for this may be the different learning environments the subjects were in during the treatment and it also could be the negative attitudes the subjects in the experimental group had towards the TOEFL test. After the pre TOEFL test the subjects reported that the test was too difficult, that they could

not understand the native speakers and that the statements in the test were not repeated and were spoken too fast. Before the post TOEFL test the subjects entered the test with the same thoughts. These thoughts could have caused a negative effect on their achievement in the post TOEFL test. The results revealed that there was a significant difference between the groups (cf. Table 4.11). This means that the control group which received traditional classroom listening instruction showed a significant progress in the TOEFL test after the treatment when compared with the experimental group.

We can see that the posttest results of the study revealed no significant difference between the control and the experimental group after the study (except the TOEFL results). But if we look at the results within groups then we can see that there were some significant differences.

The mean difference between the pretest and the posttest of the control group suggest that there was no significant progress. The control group achieved a mean difference of 2.68 when we compare the overall scores of their pretest and the posttest mean scores. The same pattern was found for the subskills *listening for specific information* and *listening for general understanding* (cf. Table 4.18). The control group did not show significant achievement in these subskills after the experiment.

Another interesting finding was that the control group showed a decrease in the subskill *listening for general understanding* after the experiment. (cf. Table 4.16). The mean difference was 6.47 with a decrease in the posttest. The reason for this decrease could not be explained but we can assume that the traditional classroom environment may have effected the improvement of this subskill in a negative manner.

However, in the subskill *listening for communicative purposes* the control group showed a significant progress after the treatment. The mean difference was 14.42. The reason for this progress may be, as mentioned before, the language exposure students had in other lessons such as speaking. As we know in the pre-posttest taking/giving directions and describing people was tested in the subskill

listening for communicative purposes. These tasks were also dealt with in speaking classes. Therefore the students may have made a positive transfer from their speaking classes. As it was mentioned before, both groups received a higher score in this subskill than in the other subskills.

Also the TOEFL scores revealed a significant progress after the treatment. The control group had a mean difference of 4.22 after the treatment and this difference was significant (cf. Table 4.17). This significance means that the traditional classroom listening instruction had a positive effect on the TOEFL listening scores.

The experimental group showed a different pattern in their own pretest and posttest scores. If we compare the overall pretest and posttest scores of the experimental group we can see that there was a significant difference between the two tests. There was a mean difference of 12.22 (cf. Table 4.19). This means that the experimental group showed significant progress after the treatment when we compare their pretest and posttest overall mean scores. In other words computer assisted listening instruction did effect the experimental group's achievement in a positive manner.

The same was valid for the subskills tested in the study. In these subskills (*listening for communicative purposes, listening for general understanding and listening for specific information*) again the experimental group showed a significant progress after the experiment (cf. Table 4.24).

However, we can not say the same for the TOEFL scores. The mean difference of the pre TOEFL and post TOEFL was 3.89 (cf. Table 4.23). This was the lowest mean difference among the other listening tests. This number did not reveal a significant difference between the two tests. The analysis of the post TOEFL test between the groups also showed that the experimental group did not show progress in the TOEFL listening tests. Here we can again state that computer assisted environment did not have a positive effect on TOEFL listening.

As a result we can say that supplementary computer assisted listening instruction had an effect on the progress of the listening comprehension ability when we look at the tests within the experimental group.

An attitude questionnaire was given to the experimental group to determine the subjects attitudes towards computer assisted learning. The results revealed that the experimental group showed a positive attitude towards computer assisted learning (cf. Table 4.25). Also the students reported that they had real fun while exercising listening on the computer. Also they reported that they felt confident in front of the computer and that they were more self-confident while working with the computer than working in the classroom. They also believed that this instruction would increase their success after using computer. These findings were similar to the findings of Aşkar, P, H. Yavuz and M. Köksal (1992). In their study they tried to reveal the attitudes of fifth grade elementary students. In that study the mean of the attitude questionnaire was 26.38 while in this study the mean was 26.79. In their study they state that the children felt quite positive attitudes towards learning with and from the computer and that they believed that their success and self-confidence were increased while studying with computers (Aşkar, Yavuz and Köksal, 1992).

As it was mentioned above, the results of the questionnaire indicate that the subjects in the experimental group showed positive attitudes towards computer assisted learning. We can assume that this positive attitude may have contributed to their speed of learning in a computer assisted environment. As the results show the experimental group showed more achievement then the control group when we compare the differences between their pretests and posttests. This means that the experimental group made a leap while the control group made steps. The positive attitude of the experimental group could have an effect on this leap.

CHAPTER VI

CONCLUSION

5.1 Summary of the Study

Both language teachers and language learners tend to overlook the importance of listening comprehension skills. The reason is that they are completely fixed to one goal and that is to speak the language. Therefore they fail to recognize that listening skills are the prerequisite skills for the development of speaking skills. We know that the most common question asked is "Do you speak ...?" but we know that no one can speak a language unless one can understand it. Still we rarely hear the question "Do you understand...?" (Chastain, 1988). This is one reason why teaching listening comprehension skills were not given the sufficient importance but still we are seeking new ways to overcome the problems in listening classrooms. This study sought the answers to solutions for problems in the listening classroom. These problems were identified to be the individual differences of learners, adequate visual input, immediate feedback and the learner's interaction with the material.

By trying to combine the listening classroom with technology which is in our case the computer, this experiment was conducted to reveal the effects of supplementary computer assisted listening instruction on general listening comprehension ability. Technology is appropriate for the needs for second language skills throughout the world and is also providing new and exciting means of helping students develop second language skills (Chastain, 1988). Chastain (1988) also adds that computer assisted instruction offers previously impossible options for out-of-classroom language use as well as exciting

possibilities for usage practice. These assumptions about the effectiveness of computers in language teaching encouraged us to conduct this study.

This study was done to determine the effects of supplementary computer assisted listening instruction on general listening comprehension ability. In the study 40 subjects were used and they were divided into two classes: control group (traditional class) and experimental group (computer assisted class). The control group received traditional listening comprehension instruction in the classroom with a textbook and an audio tape. The experimental group received computer assisted listening instruction in a computer laboratory. Both instruction was a supplementary for the general listening instruction given at the English Language Preparation Program of Anadolu University's Communication Sciences Faculty and Education Faculty. In this study computer instruction was considered as supplementary instruction for listening but not as a substitute for general classroom listening instruction.

The textbook used by the control group as a supplementary material was designed according to the content of the computer program used by the experimental group. Before the treatment started a pretest was given to determine the listening comprehension level of the subjects. The pretest consisted of three listening subskills: *listening communicative purposes*, *listening for specific understanding* and *listening for general understanding*. The treatment lasted for 20 classroom hours. At the end of the treatment an attitude questionnaire was given to the experimental group to determine their attitudes towards computer assisted learning. Later a posttest was given to the subjects. The posttest was the same as the pretest because the aim in the study was to determine if there was an effect of computer assisted listening instruction on general listening comprehension ability after the given treatment.

5.2 Conclusion

Experimental studies in the field of language teaching are conducted to reveal questions which appear in our minds after we experience certain problems

or barriers in our classrooms. This study is an outcome of such an experience. As mentioned before, in this study certain problems were experienced and the solutions for this problems were suggested to lie in the usage of technology in the classroom. In our case, technology was the computer, and its effects in the listening classroom.

Three research questions were asked in this experimental study. These questions were:

1. How do supplementary listening classes in different learning environments (Computer Assisted Class - Traditional Class) effect the students' general listening comprehension ability?

The answer to the question was that supplementary computer assisted listening instruction was not more effective than traditional supplementary classroom listening instruction. After the treatment, the analysis revealed that there was no statistical difference between the two groups.

The most important finding of the study was that the control group showed no progress when their pretest and posttest were compared. But the experimental group showed progress after the treatment. This means that supplementary computer assisted instruction could have an effect on the speed of learning.

2. How do these environments (Computer Assisted Class-Traditional Class) effect each of the listening sub-skills?

There was no significant difference between the groups' subskill scores. Supplementary computer assisted listening instruction did not have a greater effect on the subskills used in this study.

If we look within groups, we can say that the control group showed no progress in the subskills (except in *listening for general* understanding) when we compare their pretest and posttest subskills scores. However the experimental group showed progress in all of the subskills.

3. What are the attitudes towards computer assisted instruction in the Computer Assisted Class?

The attitude questionnaire given to the experimental group showed that subjects who studied with the computers had positive attitudes towards computer assisted learning. This finding showed us that the students liked the idea of using computers as helpers in their effort to learn a language. They reported that it was a good experience to learn from computers and that they would like receive more computer assisted instruction in their lessons.

As a conclusion we can say that computer assisted instruction could be useful if we look from the point of the learner. The learner thinks that using computers could be useful and that they are interesting and enjoyable. If we look from the point of success, then we can say that computer assisted instruction was not more effective than traditional classroom instruction in this study. The overall picture presented in this study shows that computer assisted instruction in listening has the same effect on general listening ability as traditional classroom instruction.

5.3 Suggestions for Further Research

As was described in Chapter III, the length of the treatment was 20 hours. Another research could be done with a time length of a whole year. The findings of this kind of research could reveal different answers to the effectiveness of computer assisted language learning or instruction.

Also other computer software could be used in these kind of experiments since we didn't know if the program used in our study was the most appropriate one for listening comprehension. As we know computer technology is improving very fast and new designed language learning software packages are being presented for the needs of learners and teachers. Therefore by using these different programs other studies dealing with the improvement of listening skills could be conducted.

This study revealed that learners show positive attitudes towards computer assisted learning, but we did not investigate if there is a correlation between attitude and success. This could be investigated, too.

Also the effect of computer assisted language instruction in other language skills like reading, grammar or writing could be the subjects of experimental studies.

REFERENCES

- Abbott, G. and P. Wingard : **The Teaching of English as an International Language**, Great Britain: Collins ELT, 1981.
- Abouserie, R. & D. Moss, S. Barasi : "Cognitive Style, Gender, Attitude toward Computer-assisted Learning and Academic Achievement." **Educational Studies**, Vol: 18(2), 1992.
- Ahmad, K., G. Corbett, M. Rogers and R. Sussex, : **Computers, Language Learning and Language Teaching**, Cambridge University Press, 1985.
- Anderson, A. and T. Lynch : **Listening**, Oxford University Press, 1988.
- Aşkar, P., H. Yavuz and M. Köksal : "Students' Perceptions of Computer Assisted Instruction Environment and their Attitudes towards Computer Assisted Learning." **Educational Research**, Vol: 34(2), 1992.
- Asche, A. and R. Howeson : **Listen1**, Oxford: Heineman ELT, 1995
- Asche, A. and R. Howeson : **Listen2**, Oxford: Heineman ELT, 1995
- Bacig, T.D., R.A. Evans and D. W. Larmouth : "Computer-Assisted Instruction in Critical Thinking and Writing: A Process/Model Approach." **Research in the Teaching of**

English, Vol:25(3), 1991

- Beauvois, M. H. : "Computer-Assisted Classroom Discussion in the Foreign Language Classroom: Conversation in Slow Motion." **Foreign Language Annals**, Vol: 25(5), 1992.
- Brown, G. : "Twenty-Five Years of Teaching Listening Comprehension." **English Teaching Forum**, October, 1987.
- Chapel, C. and J. Jamieson : "Computer-Assisted Language Learning as a Predictor of Success in Acquiring English as a Second Language." **TESOL Quarterly**, Vol: 20(1), 1986.
- Chastain, K. : **Developing Second Language Skills: Theory and Practice**, Boston: Houghton Mifflin Company, 1987.
- Dhaif, H. A. : "Can Computers Teach Languages." **English Teaching Forum**, Vol: 27(3), 1989.
- Dickinson, L. : **Self-Instruction in Language Learning**, Cambridge University Press, 1987.
- Doff, A. and C. Becket **Listening**, Cambridge University Press, 1991.

- Hope, G. R., H. F. Taylor and J. P. Pusack : **Using Computers in Teaching Foreign Languages**, USA: Prentice Hall Regents, 1984.
- Jones, L. and V. Kimbrough : **Great Ideas**, Cambridge University Press, 1987.
- Jones, C. : "Computer Assisted Language Learning: Testing or Teaching." **ELT Journal**, Vol: 37(3), 1983
- Lowe, N. and R. Bickel : "Computer-Assisted Instruction in Appalachia's Postsecondary Schools." **Journal of Educational Research**, Vol: 87(1), 1993.
- McGreal, R. : "Computer Assisted Instruction: Non-Human but Not Inhuman." **English Teaching Forum**, Vol: 26 (3), 1988.
- Nagata, N. : "Intellegent Computer Feedback for Second Language Instruction." **The Modern Language Journal**, Vol: 77(3), 1993.
- Rice, A. and S. Stempleski : **Explorations**, Boston: Heinle and Heinle Publishers, 1988.
- Richards, J. C. : "Listening Comprehension: Approach, Design, Procedure." **TESOL Quarterly**, Vol: 17(2), 1983.

- Richards, J. C. : **Listen Carefully**, Oxford University Press, 1990.
- Riding, R. and P. Chambers : "CD-ROM versus Textbook: A Comparison of the Use of Two Learning Media by Higher Education Students." **Educational and Training Technology International**, Vol: 29(4), 1992.
- Rivers, W.M. : **Teaching Foreign-Language Skills**, The University of Chicago Press, 1968.
- Rixon, S. : **Developing Listening Skills**, Hong Kong: Macmillian Publishers Ltd., 1986.
- Rost, M. : **Listening in Language Learning**, Singapore: Longman, 1990.
- Rubin, J : "A Review of Second Language Listening Comprehension Research." **The Modern Language Journal**, Vol: 78(2), 1994.
- Samuels, S.J : "Factors Influencing Listening: Inside and Outside the Head." **Theory into Practice**, Vol: 23(3), 1984.
- Sheerin, S. : "Listening Comprehension: Teaching or Testing." **ELT Journal**, Vol: 41(2), 1987.

- Shrum, J. L. and E. W. Glisan : **Teacher's Handbook: Contextualized Language Instruction**, USA: Heinle and Heinle Publishers, 1994.
- Underwood, M. : **Teaching Listening**, Hong Kong: Longman, 1989.
- Ur, P. : **Teaching Listening Comprehension**, Cambridge University Press, 1984.
- Works, N.M. : "Materials Used for the Teaching of Listening Comprehension: A Survey." **TESOL Newsweek**, Vol: 19(6), 1985.
- Wright, T. : **Roles of Teachers and Learners**, Oxford University Press, 1987.

Appendix 1

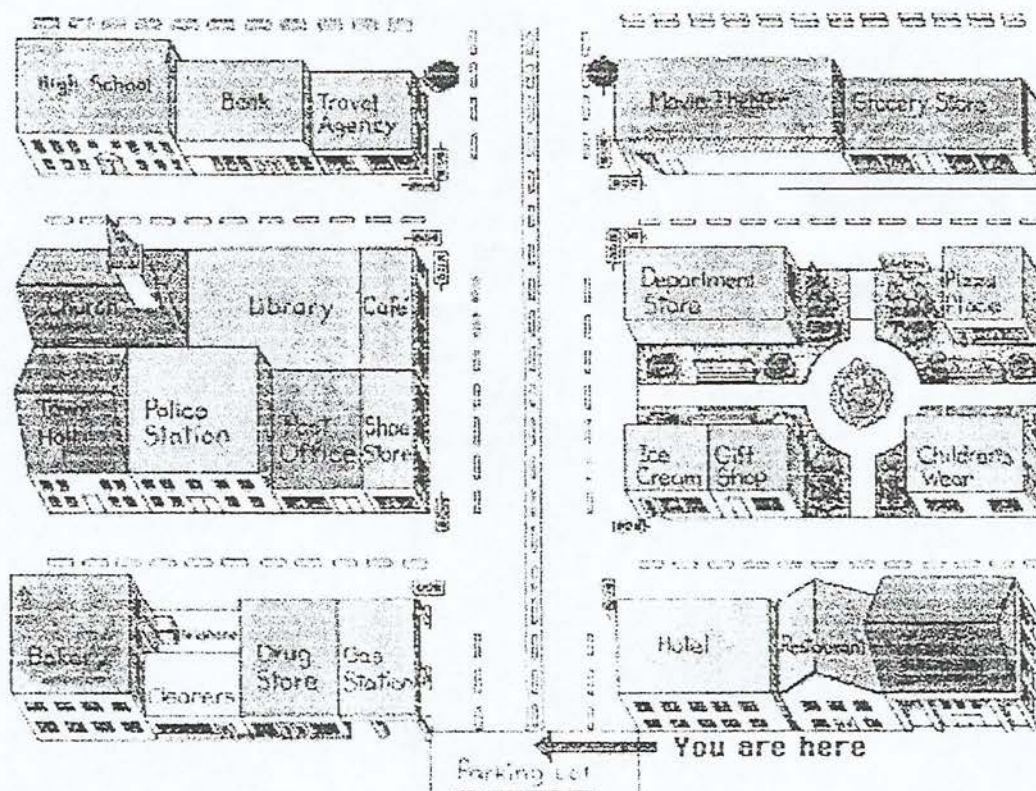
Sample Classroom Lesson

Part 1: Describe how to go from the University gate to the central post office.

Describe how to go from the University gate to the Ari cinema.

Describe how to go from the University gate to your dormitory or house.

Part 2: Follow the instructions on the tape to find the correct building on the map. Write the correct number into the correct building. You always start at the parking lot.



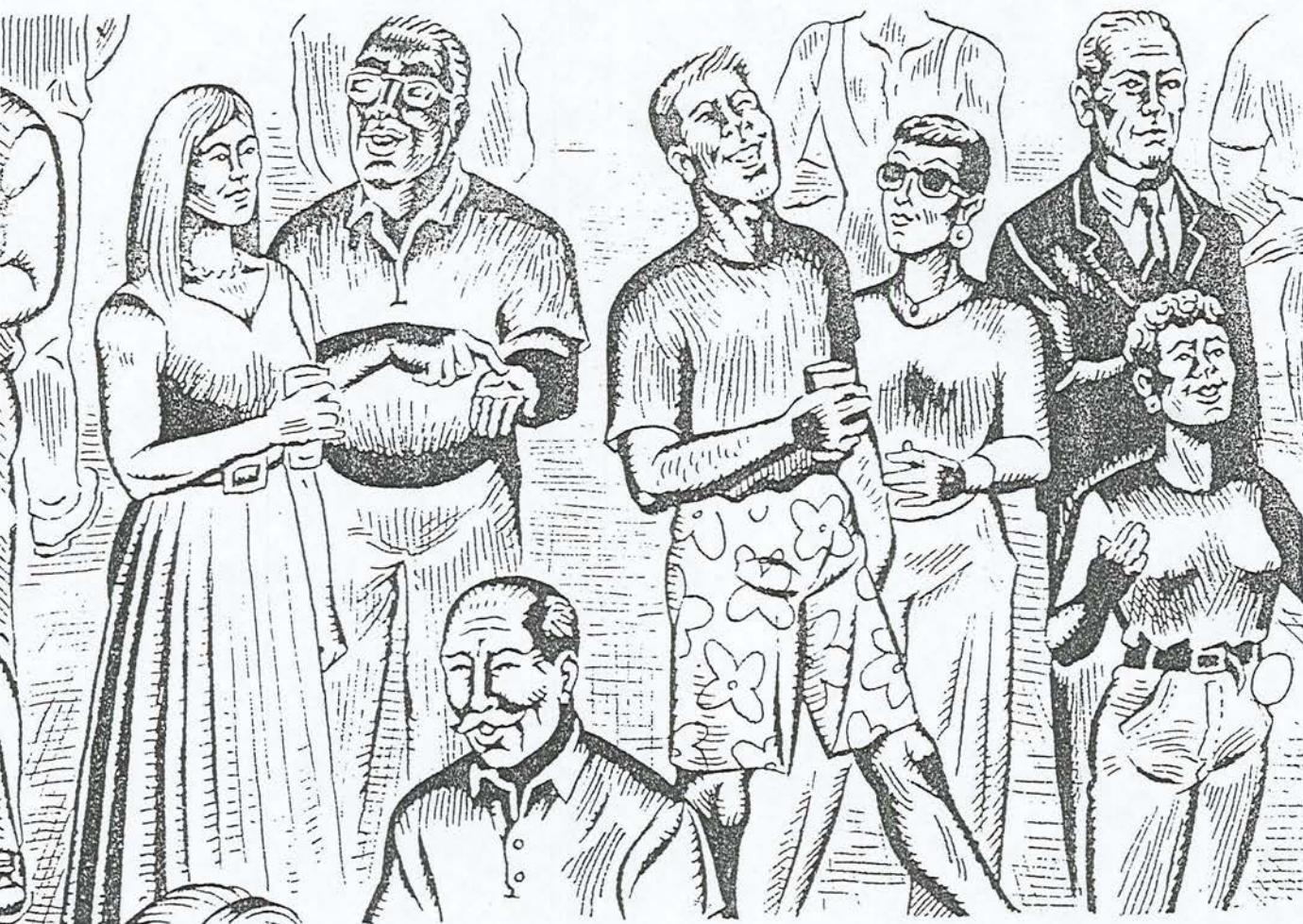
Appendix 2

Listening Pretest and Posttest

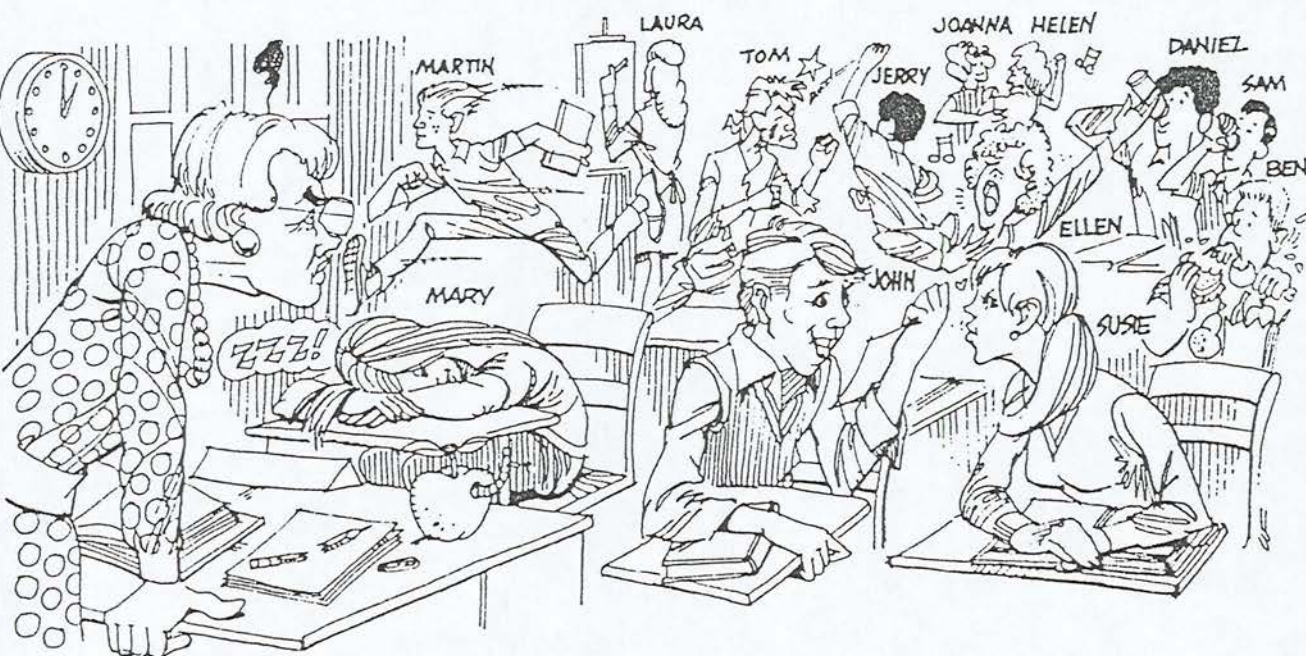
Name:

Class:

Part 1: You will hear people describing someone they are looking for at a party. Listen and number the people correctly from 1-7.



Part 2: Look at the picture of a classroom. You will hear ten sentences about the picture. For each sentence decide if it is true or false.



1. True False

2. True False

3. True False

4. True False

5. True False

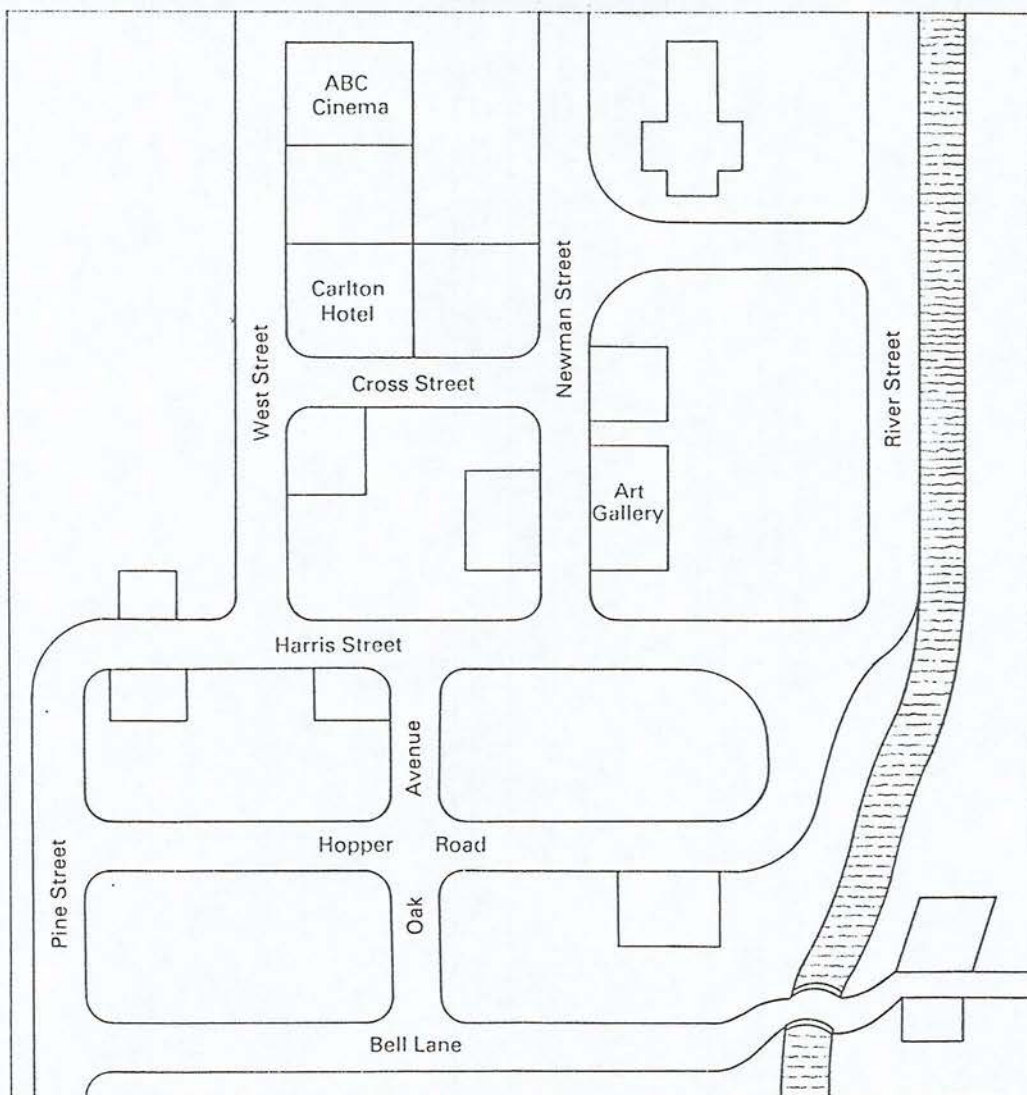
6. True False

7. True False

8. True False

9. True False

10. True False



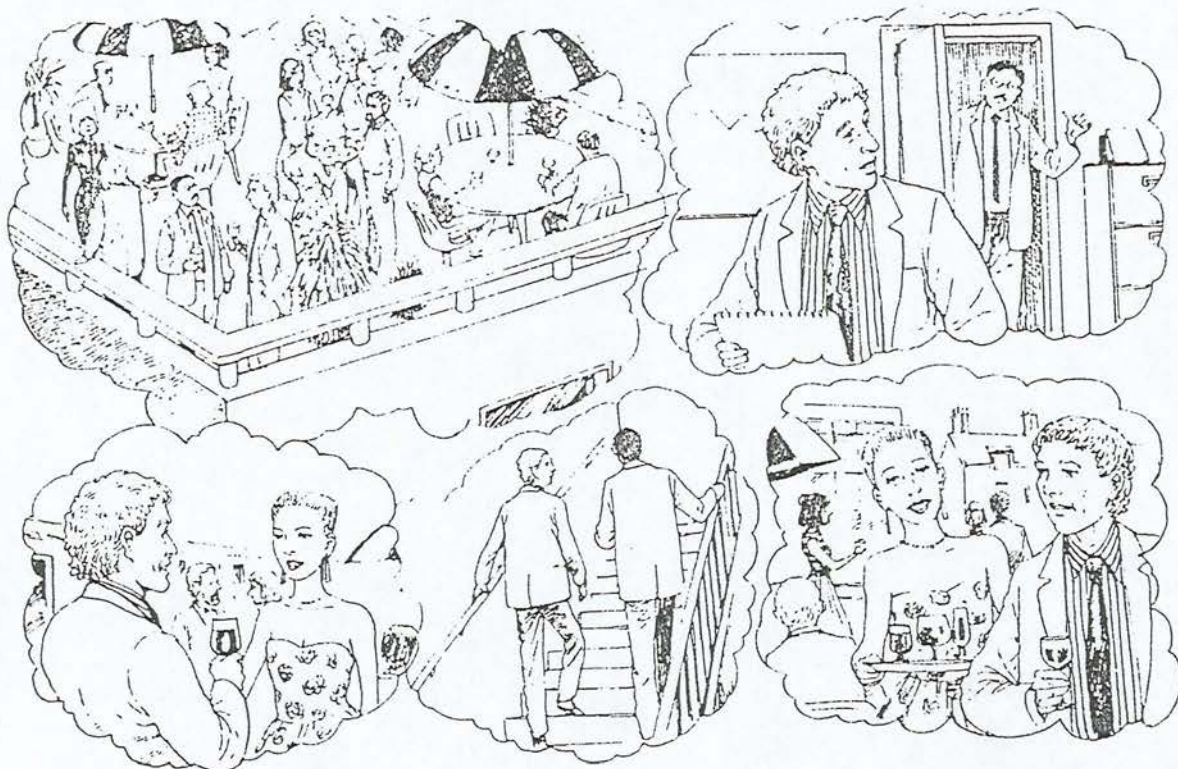
Part 3 A: You will hear people asking where the places below are. Number the correct places on the map.

- | | |
|----------------|-------------------|
| 1. chemist | 4. supermarket |
| 2. post office | 5. petrol station |
| 3. book shop | 6. bus stop |

Part 3 B: Listen to people being given directions to the places below. Mark the directions on the map and write in the correct letter for the places they are looking for.

- | | |
|----------------|-----------------|
| A. Star Hotel | D. supermarket |
| B. bank | E. travel agent |
| C. hairdresser | F. dry cleaner |

Part 4: The pictures tell the story of how a man first met his wife. Listen to the story on the tape and try to put the pictures in the correct order.



Part 5: Read the statements below. After, you are going to listen to a text about “crying”. While listening put the statements into the correct order by numbering them from 1 to 8.

- _____ Nobody knows why there is more protein in emotional tears.
- _____ There are some known facts about crying.
- _____ William Frey is using hundreds of men and women in his study about tears.
- _____ Women cry more often than men and it is unknown why they cry more.
- _____ Science is still asking questions about crying.
- _____ There are many reasons for crying.
- _____ It is good for our health to cry.
- _____ There is a theory about why people cry but it has not been proved yet.

Part 6: You are going to hear four people answer questions on a radio program. As you listen to the tape complete the following chart.

	<i>1st speaker: (David George)</i>	<i>2nd speaker: (Suzanne Brown)</i>	<i>3rd speaker: (Adolfo Vasquez)</i>	<i>4th speaker: (Linda Montgomery)</i>
1. What is the speaker's job?				
2. What does he or she do for fun?				
3. What exciting thing has happened recently?				
4. Who does the speaker admire most?				
5. What does the speaker want to be doing in 5 years?				

B: Yes, in Newman Street, next to the art gallery.

3. A: Excuse me, where can I find a bookshop?

B: There is one on the corner of Cross Street and Newman Street.

4. A: Could you tell me where the supermarket is, please?

B: Yes, in West Street, between the cinema and the hotel.

5. A: I'm looking for a petrol station.

B: There is one opposite the art gallery, in Newman Street.

6. A: Is there a bus stop near here?

B: Yes, in front of the church in Newman Street.

Part 3 B

Listen to the people being given directions to the places below. Mark the directions on the map and write in the correct letter for the places they're looking for.

1. A: I'm looking for the Star Hotel.

B: Oh, yes. Go along Bell Lane until you come to the bridge. Cross over the bridge and it's on your left.

2. A: Is there a bank near here?

B: Go down to the end of Pine Street and turn right into Harris Street. The bank's on the right.

3. A: I'm looking for a hairdresser.

B: Let me think. Oh, yes. I know where there's one. Go down Bell Lane and turn left into Oak Avenue. You'll find one on the corner of Oak Avenue and Harris Street.

4. A: Where's the nearest supermarket, please?

B: Just a second. Go down Pine Street and turn into Hopper Road. Walk right to the end, and you'll see one on your right.

5. A: Can you tell me where I can find a travel agent?

B: Certainly. Go down Bell Lane, cross the bridge, and there is one on the right, opposite the hotel.

6. A: I'm looking for a dry cleaner.

B: Um, let's see. Go down Pine Street and turn into Harris Street. You'll see one on the left, just pass the corner.

(Taken from Richards, J. C., 1990)

Part 4

I was working on a report in a little office, when a friend of mine, Richard, came by and said "I'm having a birthday party tonight. Will you come?" And his house was very close to where I was working.

It was a balmy summer's evening, and I made my way up this tall building-his house-and made my way to the roof, where lots of people were gathered.

And immediately I got up there, I bumped into this lady, who was wearing a dress which was a flower design, of beautiful red design, and she had tights, I remember, which were light red as well, which at that time were slightly unusual. She had very close-cropped hair, and a tan-a rather attractive suntan.

And she was taking round some drinks to people, and she handed my a drink. And we immediately got talking about where she'd been on holiday, which was in Spain. And that was the beginning of a very enjoyable relationship.

(Taken from Doff and Becket, 1991)

Part 5

Have a Good Cry

People are the only animals that cry. We cry when we are sad. We cry when we are happy. When someone dies, we cry. When a baby is born, we cry too. We cry for thousands of reasons. A sunset. A Beethoven symphony. A flat tire.

But crying is a mystery. What are tears? How do they come? Why do they come. Modern science does not have all the answers to these questions

We know a few facts about tears. We know for example, that all tears have some salt in them. We also know that there are two different kinds of tears-emotional tears and reflex tears. Emotional tears come from feelings, happiness or sadness, for example. Reflex tears are the kind that come when we get a piece of dirt in the eye, or when we peel an onion.

William Frey, a scientist in Minnesota, is studying the chemistry of tears. He collected samples of tears from hundreds of men and women. To make these people cry, he showed them sad, sad films (what some people call "four handkerchief movies").

Frey's study shows that there is more protein in emotional tears than in reflex tears. But nobody knows why there is this extra protein. And nobody knows where it comes from.

Frey's study also shows that women cry more often than men. In fact, they cry four times as often as men-an average of 5.3 times per month. However, Frey's study does not tell us why women cry more. Is it because of biology? Or is it because it is okay for women (but not men) to cry?

Frey has a theory about why people cry, but it is only a theory: he has not proved it yet. Frey says that stress-emotional or physical pressure- produces poison chemicals in the body. Crying removes these poisons and helps people stay healthy.

Psychologists also believe that crying is good for you. They say it helps reduce stress. Stress can cause high blood pressure, heart disease, and other illnesses. Crying can help prevent these illnesses and keep us well. For our health and happiness, it may be good for all of us, men and women, to have a good cry more often.

(Taken from Rice and Stempleski, 1988)

Part 6

Interviewer: Good morning, sir. I'm from radio station QRX, and I wonder if you'd mind answering a few questions for our survey today.

David: Uh....sure, why not?

Interviewer: What's your name?

David: Uh, my name is David George.

Interviewer: David, what do you do for a living?

David: I'm a professional baseball player.

Interviewer: Really?

David: Mm-hmm.

Interviewer: That's terrific. What do you do for fun?

David: Well, I like to read the classics - you know, Dickens, Shakespeare, uh books like that.

Interviewer: Fabulous. And what's the most exciting thing that's happened to you recently?

David: Just call me Dad. My wife and I ...uh..had our first baby.

Interviewer: Oh, (Yeah a little girl) that's wonderful.

David: Mm-hmm.

Interviewer: Who do you admire most in this world?

David: Well I admire my wifeuh... she is terrific. She's going to be a great mother, great mother.

Interviewer: Terrific. What do you want to be doing five years from now?

David: Well...uh...five years from now I'd like to be a father of five. I'd like to have lots of kids around the house.

Interviewer: That's fabulous.

David: Yeah.

Interviewer: Thanks very much for talking to us, David.

David: Well, thank you.

Interviewer: Good morning. I'm from radio station QRX, and I wondered if you'd mind answering a few questions today for our survey.

Suzanne: Not at all.

Interviewer: What's your name?

Suzanne: Suzanne Brown.

Interviewer: Suzanne, what do you do for a living?

Suzanne: I'm lawyer.

Interviewer: A lawyer? And what do you do for fun?

Suzanne: I like to run.

Interviewer: Uh,huh. Running, like...

Suzanne: Jogging.

Interviewer: Jogging. And what's the most exciting thing that's happened to you recently?

Suzanne: I got to run in the Boston marathon.

Interviewer: Congratulations. And who do you admire most in the world?

Suzanne: Oh, well I'd have to say Martin Luther King, Jr.

Interviewer: Mmm, yes. And what do you want to be doing five years from today?

Suzanne: Well, dare I say win the Boston Marathon.

Interviewer: Wonderful. Thanks a lot for talking for us today, Suzanne.

Suzanne: You're welcome.

Interviewer: Good morning, sir. I'm from radio station QRX, and I wonder if you could answer a few questions for our survey this morning.

Adolfo: Oh, yes, yes.

Interviewer: What's your name?

Adolfo: My name is Adolfo Vasquez.

Interviewer: Adolfo, what do you do for a living?

Adolfo: I'm a dancer.

Interviewer: A dancer. And what do you do for fun?

Adolfo: I watch uh ... musical movies.

Interviewer: Musical movies. And what's the most exciting thing that's happened to you recently?

Adolfo: Oh, about six years ago I moved to United States (uh-huh) and that's quite exciting for me.

Interviewer: Yes, that is very exciting. What do you - who do admire most in the world?

Interviewer: Uh-huh.

Linda: That would be great.

Interviewer: Thanks very much for talking to us today.

Linda: Okay.

(Taken from Jones and Kimbrough, 1987)

Appendix 4

Practice TOEFL Test

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[illegible]

Before you begin, be sure you have read the information on page 12. To help you become familiar with marking your answer choices correctly, both versions of the answer sheet have been provided for your practice. Remember, when you take the test at a test center, you will receive only one version of the answer sheet.

Test of English as a Foreign Language
Practice Set A—Answer Sheet



Practice Set A

LISTENING COMPREHENSION

There are three parts to this practice set, with special directions for each part. Do not read ahead or turn the pages while the directions are being read. Do not take notes or write in your workbook at any time.

Part A

Directions: For each question in Part A, you will hear a short sentence. Each sentence will be spoken just once. The sentences you hear will not be written out for you.

After you hear sentence, read the four choices in your workbook, marked (A), (B), (C), and (D), and decide which one is closest in meaning to the sentence you heard. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen. Fill in the space completely so that the letter inside the oval cannot be seen.

Listen to an example.

On the recording, you hear:

In your workbook, you read: (A) Mary outswam the others.

(13) Mary ought to swim with

(chem).

(C) Mary and her friends swam to the island.

(D) Mary's friends owned the

island

The woman said, "Mary swam out to the island with her friends." Sentence (C), "Mary and her friends swam to the island," is closest in meaning to what the woman said. Therefore, the correct choice is (C).

Now listen to another example.

On the recording, you hear:

In your workbook, you read: (A) Please remind me to

read this book.

these books?

(C) I don't mind if you help me.

(1D) Do you have a he

load this term?

The man said, "Would you mind helping me with this load of books?" Sentence (B), "Could you help me carry these books?" is closest in meaning to what the man said. Therefore, the correct choice is (B).

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D
6	A	B	C	D
7	A	B	C	D
8	A	B	C	D
9	A	B	C	D
10	A	B	C	D
11	A	B	C	D
12	A	B	C	D
13	A	B	C	D
14	A	B	C	D
15	A	B	C	D
16	A	B	C	D
17	A	B	C	D
18	A	B	C	D
19	A	B	C	D
20	A	B	C	D
21	A	B	C	D
22	A	B	C	D
23	A	B	C	D
24	A	B	C	D
25	A	B	C	D
26	A	B	C	D
27	A	B	C	D
28	A	B	C	D
29	A	B	C	D
30	A	B	C	D
31	A	B	C	D
32	A	B	C	D
33	A	B	C	D
34	A	B	C	D
35	A	B	C	D
36	A	B	C	D
37	A	B	C	D
38	A	B	C	D
39	A	B	C	D
40	A	B	C	D
41	A	B	C	D
42	A	B	C	D
43	A	B	C	D
44	A	B	C	D
45	A	B	C	D
46	A	B	C	D
47	A	B	C	D
48	A	B	C	D
49	A	B	C	D
50	A	B	C	D

Practice Set A

1. (A) She couldn't see the letter well enough to read it.
(B) She was amazed by what the letter said.
(C) She was surprised to receive another letter.
(D) She didn't realize she had read the letter before.
2. (A) You don't need any prerequisites for microbiology.
(B) You need to take certain equipment to the microbiology course.
(C) You must take another course before enrolling in microbiology.
(D) You can't be required to take any special biology course.
3. (A) Louise is happy for me.
(B) I'll ask Louise to do the copying.
(C) I took some photos of Louise.
(D) Louise copied from me.
4. (A) There's great interest shown in my ancient history class.
(B) It's hard to tell which facts are true in ancient history.
(C) It isn't easy to read ancient history texts.
(D) I really don't care much for ancient history.
5. (A) He didn't object at all.
(B) He was very upset.
(C) He set his mind to it.
(D) He wasn't annoyed with Annette.
6. (A) Agriculture is more developed here than forestry is.
(B) I heard that forestry is a popular college major here.
(C) Our mayor is interested in trees and gardens.
(D) Both forestry and agriculture are important local industries.
7. (A) Our boat has four sails.
(B) There's going to be a sale here.
(C) We're going to the tailor's at noon.
(D) We're taking our boat out for a sail.
8. (A) How do you like your short haircut?
(B) Would I look like you with short hair?
(C) Your haircut has changed the way you look.
(D) Whenever I see you, your hair looks different.
9. (A) The weather is clearly warmer today.
(B) The weather will be nice today.
(C) The weather is better in May.
(D) The good weather won't last.
10. (A) Lisa stopped to call me.
(B) Lisa no longer telephones me.
(C) I won't shop with Lisa.
(D) I have asked Lisa to call.
11. (A) I still have a cold.
(B) I wish I could get more of this gold.
(C) I wish it weren't so cold.
(D) I must buy more coal.
12. (A) It takes us a quarter of an hour to get to class on Thursday.
(B) Our Thursday classes are 25 minutes long.
(C) We have a 45-minute break between classes on Thursday.
(D) We're in class for three hours on Thursdays.
13. (A) The professor is a thoughtful person.
(B) The professor has taught older people than me.
(C) I thought the professor was younger than he is.
(D) I thought that we had a new professor.
14. (A) I feel like I'm sick.
(B) I'm wearing high-heeled shoes.
(C) Everyone here is shorter than I am.
(D) Everyone is talking about giants.

GO ON TO THE NEXT PAGE

Practice Set A

15. (A) The uniformed man regulates the heating system.
(B) Your information about the dormitory rules is incorrect.
(C) Didn't you receive a copy of the form?
(D) Weren't you informed about the new dormitory rooms?
16. (A) Tim's uncle seems to like art.
(B) It looks like the artist enjoys Tim's painting.
(C) Tim likes his Uncle Art very much.
(D) I believe Tim and his uncle are artists.
17. (A) We met on Friday and decided to follow the program.
(B) We meet once a week to plan the next week's activities.
(C) We decided to have our programs on Friday.
(D) We have a meeting every week following our Friday activities.
18. (A) The teaching assistant made up the list.
(B) The teacher assisted me in making preparations for class.
(C) I prepared the list for the teaching assistant.
(D) I was prepared to assist the teacher.
19. (A) Dr. Hamilton is sorry Larry will be left out.
(B) Dr. Hamilton doesn't think Larry should be a doctor.
(C) Larry won't be able to help Dr. Hamilton operate.
(D) Larry thinks Dr. Hamilton is a good professor.
20. (A) Only some of the students were impressed by the campus.
(B) Some of the students left the campus because it was too large.
(C) Not all the students thought the campus was too modern.
(D) All the students found the campus remarkable.

GO ON TO THE NEXT PAGE

Practice Set A

Part B

Directions: In Part B you will hear short conversations between two people. After each conversation, a third person will ask a question about what was said. You will hear each conversation and question about it only one time. After you hear a conversation and the question about it, read the four possible answers in your workbook and decide which one is the best answer to the question you heard. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

Listen to an example.

(On the recording, you hear:

In your workbook, you read: (A) Present Professor

Sample Answer

Ⓐ Ⓑ Ⓒ Ⓓ

- (B) Photograph Professor Smith.
(C) Put glass over the photograph.
(D) Replace the broken picture frame.

You learn from the conversation that the woman thinks Professor Smith would like a photograph of the class. The best answer to the question, "What does the woman think the class should do?" is (A), "Present Professor Smith with a picture." Therefore, the correct choice is (A).

21. (A) Why should we eat?
(B) Why should we study?
(C) Let's eat first.
(D) Let's study first.
22. (A) He has trouble getting there sometimes.
(B) He isn't familiar with the work yet.
(C) It makes him feel restricted.
(D) He doesn't have time to explain it.
23. (A) Buy insurance for the package.
(B) Give her parents good directions.
(C) Leave the suitcase where it won't get lost.
(D) Assume her parents the package is on its way.
24. (A) He'll help the woman in class.
(B) He has a fear of Dr. Nafi.
(C) He's repaid the woman.
(D) He thought there would be no class.
25. (A) At an airport.
(B) At a luggage store.
(C) In an office.
(D) At a train station.
26. (A) The woman shouldn't sit near the heater.
(B) The woman shouldn't take anything off the heater.
(C) The room isn't too warm for him.
(D) The heater isn't going to burn up.
27. (A) If he's written the novel.
(B) If he's finished the novel yet.
(C) When he's going to read the novel.
(D) Where he's put the novel.
28. (A) He's extremely old.
(B) He teaches archaeology.
(C) He will never delay the exam.
(D) He never gives the same exam twice.

Practice Set A

29. (A) Penise the man lightly.
(B) Send the man to a different court.
(C) Impose a large fine on the man.
(D) Leave the courtroom after the first appointment.
30. (A) It's hard for him to evaluate.
(B) It's actually rather limited.
(C) It's a great advantage to him.
(D) It improves with each conversation.
31. (A) The lounge is at the end of the hall.
(B) She doesn't know where the lounge is.
(C) She doesn't know where the student's lunch is.
(D) The secretary is in the lounge.
32. (A) She wouldn't get excited about the delay.
(B) She hadn't made any plans for the evening.
(C) She'd go to the office after her vacation.
(D) She'd be unable to take a vacation.
33. (A) Most of the students have taken it already.
(B) The students are not ready to take it.
(C) It won't cover much new material.
(D) It isn't going to cover many chapters.
34. (A) It has increased, too.
(B) It should be paid by the end of the week.
(C) It's free for students related to faculty members.
(D) It's included in the total cost.
35. (A) She prefers the ones of hunting scenes.
(B) She admires them.
(C) She can't understand what they represent.
(D) She dislikes those that lack detail.

Practice Set A

Part C

Directions: In this part of the test, you will hear longer conversations and talks. After each conversation or talk, you will be asked some questions. You will hear the conversations and talks and the questions about them only one time. They will not be written out for you.

After you hear a question, read the four possible answers in your workbook and decide which one is the best answer to the question you heard. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen. Answer all questions on the basis of what is stated or implied by the speakers in the talk or conversation.

Here is an example. On the recording, you hear:

Now listen to a sample question.

In your workbook, you read: (A) A modern dance production.
(B) A Broadway play.
(C) An exhibit of paintings.
(D) An opera.

Sample Answer

☐ A ☐ B ☒ C ☐ D

The best answer to the question, "What is the woman interested in seeing?" is (C), "An exhibit of paintings." Therefore, the correct choice is (C).

Now listen to another sample question.

In your workbook, you read: (A) Artists.
(B) Tour guides.
(C) Grocers.
(D) Musicians.

Sample Answer

☐ A ☐ B ☐ C ☒ D

The best answer to the question, "Who gave New York its nickname?" is (D), "Musicians." Therefore, the correct choice is (D).

Remember, you are not allowed to take notes or write in your workbook.

- | | |
|---|---|
| 36. (A) To explain the high drop-out rate in the sport of competitive swimming. | 38. (A) Golfing. |
| (B) To enlist support from parents for scholarship contributions. | (B) Tennis. |
| (C) To recruit swimmers from other sports. | (C) Football. |
| (D) To raise funds for a swimming competition. | (D) Running. |
| 37. (A) Parents of swimmers. | 39. (A) It is a lifelong sport. |
| (B) Tennis coaches. | (B) It may interfere with academic studies. |
| (C) Candidates for the swim team. | (C) It does not offer many financial rewards. |
| (D) Competitive runners. | (D) It is less demanding than other sports. |

GO ON TO THE NEXT PAGE

Practice Set A

- | | |
|--|--|
| 40. (A) The projections for next year's economy. | 45. (A) How supplies of goods are maintained. |
| (B) The rise in consumer prices. | (B) How groups react to price increases. |
| (C) The differences between two approaches to economics. | (C) How individuals calculate taxes. |
| (D) The difference between two countries' economic policies. | (D) How individuals spend their incomes. |
| 41. (A) To learn much faster than she has. | 46. (A) In a department store. |
| (B) To borrow money from the man. | (B) In a mechanic's workshop. |
| (C) To be in a larger class. | (C) At a newsstand. |
| (D) To be in the same class as the man. | (D) In a newspaper pressroom. |
| 42. (A) They are both applying for a scholarship. | 47. (A) Recent developments in news photography. |
| (B) They are both studying economics. | (B) The effect of water-based ink on standard printing procedures. |
| (C) They both have to write term papers. | (C) The advisability of frequent changes in dry-cleaning methods. |
| (D) They both work for the government. | (D) Experimental printing with oil-based inks. |
| 43. (A) That of large economic systems. | 48. (A) The newspapers remain thin and flexible. |
| (B) That of individual consumers. | (B) The presses can print larger sheets of paper. |
| (C) That of small businesses. | (C) The ink is fast-drying and clean. |
| (D) That of large corporations. | (D) The ink can be changed and retested. |
| 44. (A) The tables used in calculating interest rates. | 49. (A) Presses may get clogged with ink. |
| (B) The control of international money exchanges. | (B) Papers get smudged with old ink. |
| (C) The effect of federal spending on the money supply. | (C) Reporters prefer the standard method. |
| (D) The effects of federal income taxes on consumption. | (D) Machines may need to be oiled daily. |
| | 50. (A) Large print. |
| | (B) Smooth pages. |
| | (C) Pleasant smell. |
| | (D) Clean hands. |

THIS IS THE END OF PRACTICE SET A. STOP WORK ON THIS PRACTICE SET.



Appendix 5

Attitude Towards CALL Questionnaire

Read the questions and mark a cross (x) for "Yes", "Sometimes" or "No".

	Yes	Sometimes	No
1. While studying with computers, the time passes quickly.			
2. I learn quickly while studying with computers.			
3. I feel uncomfortable while studying with computers.			
4. Learning with computers increases my success.			
5. Learning from computers increases my confidence.			
6. Computers make me eager to study more.			
7. At first, learning with computers seems enjoyable but later I'm bored.			
8. Instruction with computers is very enjoyable.			
9. I would like to learn all the courses with computers.			
10. I learn easily with colorful graphics and animation.			

(Taken from Aşkar, Yavuz and Köksal, 1992)

Appendix 6

Distribution of Scores

Control Group: Pretest Scores

Subjects	Overall	LCP	LSI	LGU	TOEFL
1	28,5	38,46	31,25	17,65	14
2	56,5	80,77	36,25	61,76	16
3	67,5	96,15	53,75	61,76	20
4	64	84,62	57,50	55,88	24
5	50,5	53,85	43,75	55,88	28
6	73,5	96,15	46,25	88,24	30
7	60	96,15	67,50	23,53	16
8	52	96,15	45,00	26,47	18
9	57,5	100,00	41,25	29,41	24
10	58	73,08	50,00	55,88	22
11	64	80,77	45,00	73,53	18
12	73,5	100,00	56,25	73,53	28
13	69	92,31	65,00	55,88	18
14	50,5	96,15	38,75	29,41	22
15	62,5	57,69	63,75	64,71	20
16	68	88,46	50,00	73,53	30
17	50	57,69	25,00	73,53	12
18	67,5	80,77	53,75	73,53	16
19	54	50,00	40,00	73,53	
20	44	50,00	30,00	55,88	

LCP: Listening for Communicative Purposes

LSP: Listening for Specific Information

LGU: Listening for General Understanding

Control Group: Posttest Scores

Subjects	Overall	LCP	LSI	LGU	TOEFL
1	51	100,00	30,00	38,24	12
2	49	84,62	42,50	29,41	16
3	55,5	100,00	41,25	38,24	30
4	71	100,00	65,00	55,88	20
5	36,5	57,69	43,75	11,76	28
6	70,5	100,00	48,75	73,53	28
7	75	100,00	70,00	61,76	18
8	54	96,15	47,50	29,41	32
9	67	100,00	55,00	55,88	28
10	49,5	92,31	41,25	26,47	28
11	54,5	100,00	46,25	29,41	36
12	71	100,00	50,00	73,53	42
13	77	96,15	67,50	73,53	24
14	53,5	100,00	43,75	29,41	24
15	80,5	88,46	73,75	82,35	16
16	86,5	96,15	68,75	100,00	24
17	57,5	96,15	33,75	55,88	18
18	68	96,15	67,50	47,06	26
19	51,5	69,23	43,75	47,06	
20	45,5	84,62	28,75	35,29	

LCP: Listening for Communicative Purposes

LSP: Listening for Specific Information

LGU: Listening for General Understanding

Experimental Group: Pretest Scores

Subjects	Overall	LCP	LSI	LGU	TOEFL
1	63,5	92,31	51,25	55,88	24
2	42,5	69,23	28,75	38,24	14
3	60,5	84,62	48,75	55,88	22
4	59,5	80,77	33,75	73,53	10
5	78	96,15	47,50	100,00	20
6	60	88,46	37,50	64,71	22
7	52	88,46	57,50	20,59	10
8	44,5	92,31	38,75	14,71	26
9	58,5	76,92	48,75	55,88	20
10	58,5	84,62	36,25	64,71	24
11	50,5	80,77	48,75	29,41	10
12	55,5	80,77	38,75	55,88	20
13	53,5	96,15	46,25	29,41	14
14	72,5	96,15	63,75	64,71	20
15	49,5	80,77	46,25	29,41	10
16	52	73,08	50,00	38,24	14
17	51,5	69,23	36,25	55,88	24
18	40	88,46	42,50	0,00	12
19	43,5	88,46	46,25	5,88	
20	31,5	42,31	28,75	26,47	

LCP: Listening for Communicative Purposes

LSP: Listening for Specific Information

LGU: Listening for General Understanding

Experimental group: Posttest Scores

Subjects	Overall	LCP	LSI	LGU	TOEFL
1	89	100,00	72,50	100,00	10
2	46	73,08	35,00	38,24	18
3	63,5	84,62	56,25	55,88	14
4	67	100,00	55,00	55,88	6
5	78,5	100,00	46,25	100,00	14
6	63,5	100,00	61,25	38,24	32
7	66	96,15	47,50	64,71	20
8	57,5	84,62	48,75	47,06	16
9	66,5	100,00	61,25	47,06	12
10	73,5	96,15	36,25	100,00	18
11	77,5	100,00	66,25	73,53	22
12	67,5	100,00	48,75	64,71	18
13	65	88,46	50,00	64,71	16
14	83,5	96,15	61,25	100,00	16
15	60	100,00	45,00	47,06	22
16	65	100,00	52,50	52,94	30
17	49	84,62	35,00	38,24	16
18	59	100,00	57,50	29,41	28
19	67,5	80,77	61,25	64,71	
20	57	92,31	52,50	29,41	

LCP: Listening for Communicative Purposes

LSP: Listening for Specific Information

LGU: Listening for General Understanding