

STUDENTS' AND TEACHERS' ATTITUDES TOWARDS THE USE OF
COMPUTER-ASSISTED LANGUAGE LEARNING AT THE PREPARATORY
SCHOOL OF CELAL BAYAR UNIVERSITY

A MASTER' S THESIS

BY

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THE DEPARTMENT OF
TEACHING ENGLISH AS A FOREIGN LANGUAGE
BİLKENT UNIVERSITY
ANKARA

JULY 2004

To my beloved family and my love

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The Institute of Economics and Social Sciences
of
Bilkent University

by

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ABSTRACT

STUDENTS' AND TEACHERS' ATTITUDES TOWARDS THE USE OF COMPUTER-ASSISTED LANGUAGE LEARNING AT THE PREPARATORY SCHOOL OF CELAL BAYAR UNIVERSITY

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This study examined how students and teachers perceive use of computer technology resources in language learning and teaching by investigating the attitudes of students and teachers towards computers and the use of computer-assisted language learning (CALL), the similarities and differences between their attitudes and factors that affect students and teachers' use of CALL program at the Preparatory School of Celal Bayar University.

The data was collected through questionnaires distributed to 191 students and 22 teachers in a 30 % English-medium university. In order to get in-depth results, interviews were conducted with 4 teachers based on the results of the questionnaires. The results of the findings gathered from students' questionnaires revealed statistically significant differences in terms of level of the students. The findings indicated no difference between the attitudes of students and teachers towards computers and the use of computers in language instruction in general. The results

suggested that training of students and teachers and an effective curriculum in order to use computer technology in educational settings are required.

Key words: Computer-assisted language learning, student attitude, teacher attitude, learner autonomy.

ÖZET

ÖĞRENCİ VE ÖĞRETMENLERİN CELAL BAYAR ÜNİVERSİTESİ HAZIRLIK BÖLÜMÜNDE KULLANILMAKTA OLAN BİLGİSAYAR DESTEKLİ DİL ÖĞRENİMİNE KARŞI OLAN TUTUMLARI

Seden, Önsoy

Yüksek Lisans, yabancı Dil Olarak İngilizce Öğretimi

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Bu çalışma, öğrenci ve öğretmenlerin bilgisayarlar ve bilgisayar destekli dil öğrenimine karşı olan tutumlarını, tutumları arasındaki benzerlik ve farklılıkları ve Celal Bayar Üniversitesi Hazırlık Bölümü'ndeki bilgisayar destekli programın kullanımında öğrenci ve öğretmenleri etkileyen unsurları araştırarak, öğrenci ve öğretmenlerin dil öğrenimi ve öğretiminde bilgisayar teknolojisi kaynaklarını nasıl algıladıklarını incelemiştir.

Çalışma için gerekli bilgi, eğitim dili % 30 İngilizce olan bir üniversitede 191 öğrenciye ve 22 öğretim görevlisine dağıtılan iki farklı anket vasıtasıyla toplanmıştır. Öğrenci anketinden elde edilen sonuçlar, öğrencilerin öğrenim gördüğü kurlar açısından istatistiksel olarak önemli farklılıklar göstermiştir.

Çalışma sonuçları, öğrenci ve öğretmenlerin bilgisayarlara ve dil öğretiminde bilgisayar kullanımına yönelik genel tutumları arasında bir fark ortaya koymamıştır. Sonuçlar, eğitim alanında bilgisayar teknolojisinden yararlanabilmek için, öğrenci ve

öğretmenlerin bu konuda eğitim görmelerini ve etkin bir müfredatın olmasının gerekliliğini göstermiştir.

Anahtar sözcükler: Bilgisayar destekli dil öğrenimi, öğrencilerin tutumları, öğretmenlerin tutumları, öğrenci otonomu.

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CHAPTER I

Introduction

As the use of computer-based technology take its place in the education system, computer-assisted language learning (CALL) may provide new opportunities for applying audio-visual, cognitive and communicative approaches which support the learning of new skills more effectively than classical methods of language teaching. Moreover, teachers who are aware of CALL can benefit from this technology by improving their teaching techniques, rather than continuing to rely on classical methods in classes.

Since attitudes play a significant role in learning styles and teaching strategies, this study focuses on the attitudes of both students and teachers towards computer-assisted language learning. Furthermore, the study also explores the possible causes of diversity among student and teacher attitudes by investigating similarities and differences between the attitudes of students and teachers towards the use of computers in language instruction.

Background of the Study

In recent years, computers have started to take their place in education. Even though adopting CALL is still a controversial issue, many contemporary students and teachers believe that computer-based education will improve learning. At the same time, experienced teachers may be afraid of using this technology in the classroom because they are not familiar with the technology, while newer teachers are more

confident, because they might have had experiences in using computers when they were students. (Bebell, O' Conner, O' Dwyer, & Russell, 2003; Smith, 2003).

One important direction has been the use of computer-assisted language learning (CALL). Beatty (2003) sees CALL as a young branch of applied linguistics, defining it as any process in which a learner uses a computer and, as a result, improves his or her language. Beatty also suggests that CALL may have particular effects on students and teachers who adopt these methodologies by changing their learning and teaching styles away from learning grammar prescriptively to using language communicatively.

Computers were first used for language learning in the 1950s. In the 1960s, new language programs and computer-based activities, which aimed to investigate how computer-based activities could be developed, took their place in educational settings. These early examples of CALL, however, were only available at research facilities of universities, which severely limited their access. With the continuing development of technology day-by-day, new software and more sophisticated computers have increased access and expanded capabilities (Chapelle, 2001; Beatty, 2003).

In adopting computer-assisted language learning and teaching to schools, the positive or negative attitudes of students and teachers play an important role. Determining the reasons for these kinds of feelings might be the first step in this necessary but manageable stage of adopting CALL. Understanding the perceptions of students and teachers towards the use of CALL, and the factors that affect these attitudes, might help develop ways for students and teachers to cope with the problems that they might face in learning and teaching.

Brosnan (1995) suggests that students today are in the middle of an explosion of academic information. They can assume more responsibility for their own learning through computer technology. Moreover, they have the opportunity of exploring areas of interest and discovering their own learning styles by studying on their own in a way that seems more fun than traditional methods. In addition, the teachers that are aware of the opportunities that CALL brings may explore their teaching styles.

Statement of the Problem

A considerable amount of research has been conducted to find out how both students and teachers feel about computer technology use in classrooms (Arkın, 2003; Bebell, O' Conner, O' Dwyer, & Russell, 2003; Delcloque, 1997; Lam, 2000; Pekel, 2002; Smith, 2003; Tuzcuoğlu, 2000; Warschauer, 2003). Additional research has looked at the problems both the teachers and students may face during the learning process and language teaching (Huss, 2000; Muir-Herzig, 2003; Powell, Aeby & Carpenter-Aeby, 2003). However, there are not many studies on the use of computer assisted language learning (CALL) that address both the attitudes of teachers and students and the factors contributing to these attitudes in the learning and teaching process.

At most universities, computers are used for Internet searches, e-mailing, lesson preparation, computer-mediated communication and grading by teachers and secretaries (Bebell, O' Conner, O' Dwyer, & Russell, 2003; Smith, 2003). However, the Preparatory School at Celal Bayar University (CBU) does not provide such facilities to their students. Having three laboratories with thirty computers in each, the department has an opportunity to use CALL in second language teaching and learning. Students take four one-hour laboratory classes that are designed to provide supportive materials for classes and develop new approaches to teaching and learning

skills. Regarding my own experience in using the computer-based program in second language teaching, it is difficult to set the background and train both the students and teachers in using these kinds of computer-based programs. We faced many problems such as program usage, technical difficulties and prejudicial attitudes.

Since the attitudes of students and teachers play a significant role in adopting CALL, this study will explore the attitudes of students and teachers towards the use of computers at the Preparatory School of CBU in order to determine the factors that contribute to their attitudes. Finally, it will investigate whether there are similarities or differences between the attitudes of students and teachers towards the use of CALL.

Research Questions

The study addresses the following research questions:

- 1) What are Celal Bayar University students' attitudes towards the use of computers as assisted materials for classes?
- 2) What are Celal Bayar University teachers' attitudes towards the use of computers as assisted materials for classes?
- 3) What similarities and differences are there between the students' and teachers' attitudes towards the use of CALL?
- 4) Do differences in students' attitudes towards the use of CALL differ along gender and level lines?

Significance of the Problem

CALL offers many opportunities both for students and teachers. If Turkish schools are to benefit from these programs and integrate computer-based instruction into other practices, teachers will play an important role in their implementation. Thus, this study will also explore the teachers' attitudes towards computer use for

second language instruction, since these attitudes are important in effective teaching. In addition, this study will provide important information about the attitudes of students towards CALL.

This study is useful since there are few studies about the use of computer programs as assisted materials for English teaching classes that address both the students and teachers. It will attempt to identify the attitudes of students and teachers towards the use of CALL by drawing comparisons between the perceptions of students and teachers and what factors can be identified as contributing to their attitudes. Moreover, it will provide information about how to effectively use the resources that we have at the Preparatory School of Celal Bayar University.

Conclusion

This chapter gave a brief summary of issues related to use of computer technology in language learning and teaching. The second chapter is a review of the literature on computer-assisted language learning and students and teachers' attitudes towards the use of CALL and their roles in learning and teaching with computers. The third chapter presents information about the participants, instruments and procedures followed to gather data and analyze the data. The fourth chapter presents the procedures for data analysis and the results of the findings. The last chapter presents the discussion of the findings, pedagogical implications, limitations and suggestions for further research.

Key Terminology

The following terms are used throughout the thesis and are defined below:

CALL

“Computer-assisted language learning, a term designating both software and Internet enhanced approaches” (Hanson-Smith, 2000 as cited in Arkin, 2003, p. 9).

Student Attitude

In this study the term indicates students' perceptions towards the use of computers in language instruction and computers in general.

Teacher Attitude

In this study the term indicates teachers' perceptions towards the use of computers in language instruction and computers in general.

Learner Autonomy

“Capacity for detachment, critical reflection, decision-making, and independent action” (Little, 1991, p.14).

CHAPTER II: LITERATURE REVIEW

Introduction

Computer-Assisted Language Learning (CALL) is fast gaining recognition in the learning and teaching of a foreign language. Educational institutions have begun to expend great effort in trying to install computer facilities for classroom usage in order to enhance language learning. Hence, there has been a significant amount of research that explores the role of computers in the learning and teaching process and its impact in the classroom (Chapelle, 2001; Dhaif, 1989; Galavis, 1998; Gruich, 2002; Hubbard, 1996; Kenning & Kenning, 1983; Levy, 1997; Muir-Herzig, 2003; Pennington, 1996; Schofield, 1995).

This chapter reviews the literature on the importance of computers in language learning and teaching. Specifically, it focuses on the advantages of computer technology both for students and teachers, and the limitations in CALL applications, the role of students in CALL classrooms, the role of teachers in teaching with computers, students' attitudes towards CALL in classrooms, and teachers' attitudes in using this technology effectively.

The Importance of CALL

In traditional teacher-centered classrooms the role of the students is simply to listen and follow the instructions of the teacher and the teachers' role is to give instruction, to ask questions, to initiate actions and interactions, and to set limits on activity times. In addition, teachers are responsible for giving the facts and defining

important ideas. The activities held in the classrooms are also generally within the teachers' domain (Sandholtz et. al., 1990). Metz (as cited in Muir-Herzig, 2003) calls these types of learning and teaching environments "real classrooms." It has long been recognized that there are disadvantages to the use of traditional methods in classrooms. Commenting on these 'real classrooms,' Sandholtz et. al. (1990) say that "schools and teachers are limiting instruction to drill and practice" which emphasizes "the material that the national norms tests in order to meet the set on standardized tests" (Sandholtz et al., as cited in Muir-Herzig, 2003, p. 2). Thus, the students become better test takers, but do not develop higher-order cognitive learning. For instance, if the classroom activities do not reflect real life situations, students may have difficulty in producing the language in real life situations. This research also indicates that this type of teaching to the tests brought about new efforts and methods to move language instruction from "rote learning to problem solving, concept development, and critical thinking" (Sandholtz et al., as cited in Muir-Herzig, 2003, p. 2).

The use of computer software programs as supportive materials in classrooms provides new opportunities for applying an audio-visual approach, cognitive approach, and communicative approach. While applying an audio-visual approach, pronunciation is stressed, lessons with dialogues are utilized, and mimicry and memorization are used. In a cognitive approach the instruction is often individualized, so students are responsible for their own learning. While using a communicative approach, the goal of language teaching is learner ability to communicate in the target language (Celce-Murcia, 2001). These approaches integrated in software programs support new learning skills more effectively than classical methods for language learning. Beatty (2003) states that the application of

CALL might be helpful for learners in improving their reading, writing, listening and speaking skills, as well as encouraging autonomy in learning, and for teachers in improving their teaching skills since it can be integrated into research and practice.

Jones and Fortescue (1987) note that computers may be useful in developing reading skills for language learners in three ways: 1) *Incidental reading* in which the learners read the texts for the purpose of completing the activity successfully; 2) *Reading comprehension* in which CALL software programs provide traditional questions that learners answer and have an immediate response for reading comprehension as well as grammar and vocabulary development; and 3) *Text manipulation* in which software programs offer various types of continuous texts that learners can study both in terms of content and structure.

Moreover, Jones and Fortescue state that since developing reading skills includes deducing the meaning of unknown words from context and training students to read efficiently, the software programs offer various kinds of exercises such as matching the words with their meanings or displaying "...a short text, [in which] a random word is highlighted, and the learner has to select the part of speech from a list of choices" (p.33). Healey (1999) also states that computers may be beneficial in developing reading skills such as skimming, scanning, recognizing details, main ideas, and topic sentences, predicting what will come next and reading quickly by offering authentic and communicative tasks with pictures, sound effects, listening options and animations that motivate students in reading.

Software programs might also be helpful for learners in improving their writing skills. For instance, word processing programs are useful and time saving since the students can add a paragraph or check grammar mistakes easily while writing their assignments. In addition, word processing offers users various types of

options that enable them to add schemas and tables and save the changes in a text. Students also have the chance to make revisions of their writing. Moreover, word processing programs allow students to better organize their assignments by providing the opportunity for checking the spelling, punctuation and sentence structure (Costanzo, 1989; Dunkel, 1991; Howie, 1989; Neu & Scarcella, 1991).

Computer programs can also develop listening and speaking skills. Listening software programs provide voice tracks that allow students to hear a native speaker. In addition, such programs allow students to hear the parts that they do not understand over and over again. While listening, students also have the opportunity to develop their pronunciation, which plays a significant role in enhancing speaking skills (Hanson-Smith, 2000; Pennington, 1989). Computers offer students the chance to take part in dialogues and record their own voices. Thus, they have the chance to compare what they have recorded with the originals.

Lastly, as Benson and Voller (1997) state, there has always been a perceived relationship between educational technology and learner autonomy. They add that computer software applications in language instruction as supportive tools may promote autonomy by providing students the chance of self-study.

The Advantages of CALL for Students

This section will discuss the advantages of CALL applications in the learning process for students. In today's student-centered classrooms in which students take the responsibility for their own learning, computers may help students by providing them with a wide selection of opportunities for developing their skills in the learning process. While it is frequently recognized that student-centered teaching challenges teachers to reconsider their traditional teaching methods, it can also challenge students to reconsider their learning methods. In the student-centered classroom, the

student's role is changed from 'being taught' to 'learning' and the teacher's role is changed from 'expert' to 'facilitator, guide or collaborator' (Jaber, 1997). Students become responsible for their own learning and finding out their own learning styles, while the role of the teacher is to direct their students in the learning process. In other words, CALL may be seen as part of this broader, student-centered approach. Indeed, computers may have a significant role in this process since they give students the responsibility of studying and learning on their own (Kenning & Kenning, 1983).

CALL provides a number of advantages for students, including: interactivity, privacy, pacing, independent practice, patience, automatic feedback, and ability to edit work. As a result of these features, students who use CALL may become more autonomous learners, be more motivated, and have a desire to try out new forms of language.

The opportunities that computers provide for their users differ in a number of ways. As Kenning & Kenning (1983) state, what distinguishes computers from other technological devices like tape recorders, videos and film projectors is the fact that they allow for interaction. Kenning & Kenning support this by stating that the unique particularity of computers as an assisted material for education is their interactive capability. By contrast, course books, tape recordings or videos cannot correct students' mistakes or errors and cannot provide information on correct forms.

Kenning & Kenning also suggest that with the privacy offered by computers the anxiety level of students is lowered. While working with computers students are responsible for everything they do. These researchers note that often students are afraid of making mistakes or asking questions. This can be explained by their fear of being mocked if they make mistakes in the classroom activities or having a low opinion of their teachers.

Taylor (as cited in Levy, 1997) explains the role of computers as a tutor, as a tool, and as a tutee. While functioning as a tutor, computers provide the students with materials, respond to the students' questions and keep the records of each student. While functioning as a tool, the learner can benefit from computers in a variety of ways such as, improving skills like reading, writing, speaking, and searching subject areas. In explaining the function of the computer as a tutor, Taylor suggests that in order to use the software programs the learners and the teachers should learn how to use and program the computers. He continues by explaining the distinction between the computers' role as a tutor and as a tool. While functioning as a tutor computers evaluate the student input in a way that tools cannot.

While providing the necessary environment for the students to work on their own and at their own pace, computers also give opportunities for slow learners and students who miss a class to catch up. Students that miss their classes have the chance to review the sections that they have missed whenever they want since the instruction is loaded on computers.

Students who finish their work earlier than others can also benefit from the opportunities computers provide. For instance, they have the chance of doing extra practice on the subject being studied. By contrast, in 'real classrooms' teachers do not have the same opportunity for review due to the pace of the syllabus. At the same time, computers are patient so students can go over the same points as many times as is necessary. Software programs offer them the chance to study the unclear parts or different topics over and over again.

Furthermore, students can carry out tasks and receive automatically provided feedback. Other technical devices such as cassette players or videos cannot give feedback to the students. In that case teachers again provide the feedback.

By writing software programs, students are also able to practice editing a piece of writing by deleting, moving, and inserting text. They have the opportunity to check the structure of their writings since the computer programs show whether they have written a word incorrectly.

The main effect of these features is that the students can work through exercises on their own, so they make significant progress in becoming autonomous learners. According to Little (1991), autonomy can be defined as responsibility taken by students for their own learning, making decisions in which learner can "...develop a psychological relation to the process and content of his learning" (p.4).

Moreover, since software programs can interact with students and provide them with visual and animated programs, computers may also have a beneficial effect on students' motivation. Software programs can make exercises and drills more interesting and effective than tutoring or conventional practice drills. In addition, these drill programs provide a wide selection of multiple-choice questions and they encourage students by giving instant answers by featuring user friendly screen displays such as showing smiling faces or by verbal or written statements like 'good, you have chosen the right answer' or 'sorry, try again'.

Furthermore, it has been suggested that students using computers are more willing to try out new forms of language on their own. For instance, in writing courses the students have to deal with many skills at once such as organizing their ideas, selecting the right words, spelling and arranging them in grammatical and correctly punctuated statements. The computer programs provide many opportunities to practice organizing their assignments and to learn the correct forms, so students become more confident in engaging in the complexities of writing (Costanzo, 1989;

Dhaif, 1989; Galavis, 1998; Hardisty & Windeatt, 1989; Kemp, 1993; Kenning & Kenning, 1983; Pennington, 1996).

The Advantages of CALL for Teachers

I turn now to the advantages of CALL for teachers. These may be listed as follows: helping teachers to use their time efficiently in the learning process, providing the opportunity to observe learners, making teaching easier for the instructor, and giving the teacher the opportunity to develop their teaching skills.

First, the use of computers provides teachers with the opportunity of making better use of their time and expertise by handling a number of mechanical tasks such as correcting and marking exercises. This will allow more time for preparing lessons and activities like discussions, presentations and project work. By integrating computers in language testing, teachers can save time since the computers do all the evaluation and calculation for teachers (Chapelle, 2001).

Second, by adopting CALL software programs (e.g. educational CDROM packages) into the curriculum, the task of the teacher becomes easier (Levy, 1997) since these kinds of software programs give teachers the opportunity of assessing their students' levels more easily than assessing by using records of the students. Moreover, package software programs offer teachers the opportunity to see the records that show how much time was spent on each question or part by the student. Thus, teachers have the opportunity to observe the students and analyze what goes on in their classrooms and reassess the main principles of the learning and teaching process while students are working on their own. (Kenning & Kenning, 1983). In that case the design of computer laboratories is also important. Ideally, these should be designed in order to make both pair and group work or individual study possible

and to make observation of students by the teacher easier (Kenning & Kenning, 1983; Myers, 1993).

In addition the integration of skills like reading, writing, listening and speaking into software programs also makes teaching easy for the educator (Kenning & Kenning, 1983; Pennington, 1989). For instance, teachers often have difficulty in finding authentic texts or listening and speaking activities (Celce-Murcia, 2001). However, software programs offer a wide selection of texts for reading with the option of listening.

Finally, using computers teachers also have the opportunity to develop their teaching skills by catching up with recent innovations and events in every subject area just by surfing on the Internet. In addition, they have the chance to improve their writing skills with the opportunities that word programs offer while doing their academic work.

Limitations in CALL Applications

Although computers provide many opportunities within the learning and teaching process, they clearly have their limitations. These limitations include hardware and software problems, design of computer laboratories and computer users' fatigue and loss of concentration.

Research undertaken by Sandholtz et. al. (1990) on classroom management in a high-tech environment indicates that with the introduction of a computer-centered approach, technical problems such as hardware and software problems slow down the learning and teaching process. Without functioning equipment, students are unable to make any progress and fall behind in their work, so teachers have to deal with such software and hardware problems and all of their accompanying details that computers bring into classrooms.

Moreover, computers are not suited to all the activities that are held in the classrooms (Kenning & Kenning, 1983) since most of the software programs and the computer laboratories are designed for students to work on their own. This situation makes pair or group work very difficult in computer laboratories.

There are also other problems that the users of CALL may face such as tiredness or loss of concentration since reading from a screen is more difficult and tiring than from a printed text. In addition, since some students and teachers might not be as competent as others in using computers, this may also slow down the learning and teaching process. The other point to emphasize is that computers alone cannot fulfill all the aspects of learning and teaching process. The students that are not competent enough in the second language that is being taught in the school need the instruction of teachers while working with computers. Furthermore, although computers can interact with students by giving them instant feedback, this interaction may not be the same as teachers interacting with students because there are many pedagogical aspects involved in teachers' interaction with students. (Bebell, O'Conner, O'Dwyer & Russell, 2003; Hardisty & Windeatt, 1989; Kenning & Kenning, 1983; Pennington, 1996; Sandholtz et. al. 1990). For instance, teachers can raise the level of self-efficacy of their students and they can also motivate them by considering their weaknesses and strengths while giving feedback or interacting with them.

Student 's Role in CALL Classrooms

This section explores the students' roles in computer-integrated classrooms compared with 'real classrooms'. In 'real classrooms' students are given roles such as working in pairs or groups. They also interact with their classmates during the classes. However, in computer laboratories the role of the students changes as the

environment is changed. They become responsible for everything they do in labs since they are working on the subject matter on their own. A number of classrooms are designed with separate sections for computer use for each student (Hardisty & Windeatt, 1989; Muir-Herzig, 2003). This is the case in the Preparatory School at CBU where the computer laboratories are designed with separate sections for students in order to give them the chance to study with the computer on their own, interacting with their teacher and friends much less than they would do in a classroom. Thus, students may make progress in learner autonomy through individual study and the role of their teacher is that of facilitator in laboratories (Pennington, 1996). In addition, as Dhaif (1989) states, computers can offer teachers the opportunities of using their time more efficiently while preparing for class and improving their analytic skills while monitoring the students in a computer laboratory. Thus, they may have the chance to improve their teaching styles.

Teacher's Role in CALL Instruction

The roles of teachers in CALL instruction can be listed as choosing the right CALL programs to be integrated into curriculum, monitoring and guiding students, and solving software problems. The importance of CALL in allowing learners and teachers to recognize grammatical, semantic, and sociolinguistic aspects of language use cannot be separated from one another in language learning activity (Pennington, as cited in Garrett, 1990). This statement draws attention to the role of the teacher in CALL classrooms. Using CALL programs in the classroom might seem difficult but interesting for students and learners at first since the teachers are responsible for choosing the necessary CALL programs that will improve students higher-order cognitive skills and understanding of the language use and integrating CALL into the curriculum (Opp-Beckman, 1999). Following Huss and Susan (1990), it is important

to choose the software programs that enable students to think, search and understand the concepts on their own.

Ahmad et al.(1985), Chao (1999) and Howie (1989) note that the role of the teacher in a computer-centered classroom is that of monitor. This is the situation in the Preparatory School of CBU. Here teachers in CALL laboratories assume roles such as explaining the unclear parts in instructions given by the computer programs. They can also monitor students during laboratory sessions and guide them any time they need since it is easy to follow their progress and determine their needs while they are working with computers.

Often classrooms are teacher-centered while the computer laboratories are student- centered. This may also necessitate a change in the learning process and environment since the teacher must give up a degree of control over students and permit the class to become more student-centered rather than being teacher-centered (Neu & Scarcella, as cited in Dunkel, 1991). In a computer laboratory teachers are like a guide or a facilitator. Moreover, they may be seen as a technician who solves technical problems related to passwords, printing, and software. On the other hand, in more traditional classrooms the teachers are experts and directors rather than facilitators. Furthermore, it is hard to address the whole class in ‘real classrooms’ and motivate all the students and attract their attention. Since the students’ attention may move to different subjects in classrooms, this might also distract the attention of the teacher (Dunkel, 1991; Jaber, 1997; Schofield, 1995). A study conducted at a number of American high schools by Schofield (1995) reported that as the class became less teacher-centered in laboratory sessions, teachers were more helpful and friendly to their students. They sat next to them, talked to them and helped them whenever it was necessary.

Neu and Scarcella (1991) give an example of the changing role of a teacher in a computer writing class. They state that “In the computer-based writing class, the role of the teacher needs to change from that of ‘provider and judge’ to that of ‘facilitator and resource person’. This change in roles appears to meet the instructional needs of adult learners” (p.173). Nue and Scarcella also suggest that it might be particularly appropriate for the teacher to adopt “the role of ‘resource person’ rather than ‘provider of information’ in a computer writing class, which contains students ... who may have particular difficulties in writing that others in the class do not have” (p.173).

Thus, individual guidance and consulting by teachers might be more beneficial for learners since student must figure out the grammatical rules without initial whole class instruction. Nue and Scarcella (1991) suggest that educators should not give the whole picture but make their students guess the parts that are not given. While studying on their own, students can make progress in being autonomous learners.

Despite the advantages of CALL in language instruction, teachers continue to have an important role in language teaching since they can often interact with students more effectively than the computers do. Howie (1998) states that computers cannot serve as a substitute for a teacher or a curriculum. There are a number of research studies that support this idea (Brierley & Kemble, 1991; Dhaif, 1989; Kenning & Kenning, 1983; Levy, 1997; Maddison & Maddison, 1987; Robinson, 1991). As Robinson (1991) notes, CALL should be considered an integral part of instruction and teachers as an integral part of CALL. Since computers cannot guide the students directly and cannot take the role of a teacher as a class manager, computers can be considered a complement to what teachers do in classrooms.

If educators are aware of what CALL brings to the learning and teaching process, and of its power to urge the teaching profession to better analyze what happens in classrooms and to reassess the main principles of the educational process, they can benefit from this technology and adapt it into their curricula (Kenning & Kenning, 1983).

Students' Attitudes towards CALL Use in Classrooms

This section reviews students' attitudes towards CALL use in instruction. Graham (1997) states that individuals react to situations according to their emotions and wills. However, Schumann (1978) claims that social and psychological factors are more important than emotions. Thus, student's reactions to the learning process can be explained by combination of social and psychological factors. Social factors may include perceptions and wishes of parents. Moreover, the positive or negative attitudes of their peers may be influential on students' attitudes towards learning. Psychological factors may include self-esteem and students' willingness to learn better.

Since CALL programs are considered tools that enhance autonomy in learning, the attitudes of students towards CALL instructions in classrooms are important for success in the learning process. It is possible, for instance that if the students have positive feelings about the use of computers in language instruction, they are likely to be more willing to learn the language and take the responsibility for their own learning. There are a number of studies carried out by Kulik and his colleagues (1986, as cited in Dunkel, 1991) and these studies indicate that students feel more positive attitudes towards writing and vocabulary study, when they feel that learning word processing is useful and they can improve their vocabulary. However, in contrast to what we might predict, the series of earlier studies

undertaken by Kulik and colleagues indicate that although most of the participants stated that they like using computers, computers do not have much effect on students' motivation or on encouraging them to take responsibility for their own learning. (Kulik & Kulik, as cited in Dunkel, 1991; Piper, 1987 as cited in Dunkel, 1991).

On the other hand, students might also develop negative attitudes while using this technology. These problems can arise from their lack of experience with computers, lack of direction in the efficient use of computers or teachers' negative attitudes towards CALL programs, since teachers represent a model for their students. These kinds of problems may affect learners in demonstrating negative attitudes towards computer use in instruction. Thus, teacher attitudes also have a significant role in the efficient implementation of CALL programs in language instruction.

Teachers' Attitudes towards the Use of CALL

Many teachers do not use computers not because they are technophobic, but because they are unaware of the usefulness of computers in instruction, and of how to integrate them in their curricula and classrooms (Dusick, 1998; Lam, 2000). In addition, being aware of the functions and uses of CALL in classrooms influences teachers' acceptance of the use of computers in educational settings, as well as their approaches to computers and integration of them into curricula and language teaching (Akbaba & Kurubacak, 1998; Clark, 2000; McWilliams & Taylor, 1998).

Today, although the importance and benefits of integrating CALL programs into education systems are recognized by many educators, there are external and internal factors that play an important role in shaping the attitudes of teachers, such as lack of training and access to computers and software, inadequate curricula and

lack of technical support. The internal or social cognitive factors, which shape attitudes include: teachers' prejudiced beliefs about technology and computer competency, their unwillingness to change their methods since they are unfamiliar with computer technology resources, and their self-efficacy. In addition, external factors, like lack of training and support from the administration, resources and teachers' backgrounds with computer use may make them feel less confident with this technology in education. (Bebell, O' Conner, O' Dwyer, & Russell, 2003; Dupagne & Krendl, 1992; Dusick, 1998; Ertmer, Addison, Lane, Ross, & Woods, 1999).

A survey conducted by Guardart (as cited in Pilus, 1995) provides useful insights into the prejudicial beliefs of teachers concerning the use of computers in language instruction. This survey was conducted in Malaysia and the Malaysian teachers claimed “ computers are scientific devices that can be handled only by those specializing in areas such as science, computer science or mathematics” (p.27). Pilus explains that in Malaysia language teachers mostly graduate from Arts and they may have a tendency to be apprehensive and skeptical in using computers since they feel that computers are mathematical devices. However, Pilus argues that this prejudicial belief can be overcome if the teachers receive appropriate training and are made aware of what the computers can bring to their teaching.

Teachers also have concerns about integrating computers into instruction because of their unwillingness to change their classical methods (Dupagne & Krendl, 1992). Dupagne and Krendl suggest that this may be based upon a lack of knowledge and understanding about computers. They suggest investing more time be focal on teacher training.

Marcinkiewicz (1994) states that just focusing on external factors may not be effective in promoting teachers' use of computers for instruction. The internal conflicts that arise from teachers' lack of computer competence should also be taken into consideration since internal and external conflicts are interconnected. A study done by Ertmer et. al. (1999) supports the idea that the external factors that affect teachers' use of computers might be the causes of internal factors. The results suggest that the internal beliefs of teachers interact with external factors to facilitate or limit their perception in using this technology.

Marcinkiewicz (1994) argues that having the necessary environment for adopting CALL may not be enough to persuade teachers to use it. Starting from this point, Marcinkiewicz conducted a study that explores the use of computers for instruction by a number of teachers and what causes others not to use them. The results of the study showed that the preferences in using this technology arise from teachers' self-confidence and their willingness to change. Baylor and Ritchie (2002) explored the aspect of willingness to change of teachers. They investigated the willingness to try new instructional technologies, the beliefs of teachers in taking risks while integrating computers into their instruction and their beliefs about the importance of CALL in instruction for learners' content acquisition. They concluded that the effective use of this technology depends on teachers' openness to change and willingness to take risks, and on their experience and practice in using it.

On the other hand, the study of Bebell, O' Conner, O' Dwyer, & Russell (2003) indicates that although experienced teachers may not be familiar with computers, they are more willing to use them in their instruction, while newly qualified teachers prefer not to use them for instruction even though they are comfortable with use of computers in their homes.

Conclusion

The use of computers has a great potential as an educational tool in classrooms in providing new learning and teaching opportunities. However, for students learning to integrate this technology into their learning styles and for teachers using this technology in instruction there remain problems connected to what are sometimes called internal and external factors. The problems suggest that the attitudes of students and teachers are critical in how technology is used in the learning and teaching process and integrated into language instruction. Herman (2002) states that the integration of computers in language instruction takes time since not all educators accept this usage. Thus, willingness and openness of teachers to change and necessary training in order to use CALL implementations efficiently in class play a significant role in the process of integrating CALL programs. Since students see their teachers as a model they may also be affected by the attitudes of their teachers.

CHAPTER III: METHODOLOGY

Introduction

This study explored the attitudes of students and teachers at the Preparatory School of Celal Bayar University (CBU) towards computers and the use of CALL programs in language instruction. The study specifically examined how students and teachers perceive CALL package programs as part of the curriculum in language instruction and their possible classroom implementations.

Moreover, the study aimed to provide information about how to effectively use the resources that we have at Celal Bayar University by exploring the factors that contribute to students and teachers' attitudes.

The study addressed the following research questions:

- 1) What are Celal Bayar University students' attitudes towards the use of computers as assisted materials for classes?
- 2) What are Celal Bayar University teachers' attitudes towards the use of computers as assisted materials for classes?
- 3) What similarities and differences are there between students' and teachers' attitudes towards the use of CALL?
- 4) Do differences in students' attitudes towards the use of CALL differ along gender and level lines?

This chapter presents the setting and participants of the study, the instruments used for data collection and the procedures of data collection and data analysis.

Setting and Participants

This study was conducted in the Preparatory School at CBU. The preparatory school is obligatory for departments such as Business Administration, Economics, Accounting and International Trade. Thirty percent of courses in these departments are in English. In total, there are four hundred and thirty-five students at the preparatory school.

Students are placed at appropriate levels from beginner to intermediate by a placement test held at the beginning of the academic year. There are four levels: A, B, C, and D. Each semester students take five quizzes. These consist of three main core quizzes as well as, reading and writing quizzes worth 10% of this grade. They also have three midterms worth 30%. At the end of the second semester students take a final test, which counts for 60% of their grade. Students are required to have an average of 70% from all the above in order to start taking courses in their department.

In our school, lab classes that offer CALL implementations for second language instruction are integrated into the curriculum. Our school has three laboratories with thirty computers in each. This year students have four one-hour classes in a week. The computers are loaded with a CALL program, which includes various programs such as Interchange, Longman, Oxford, and so on. The program consists of the following:

1. A grammar section supported by grammar exercise section.
2. A Cambridge Dictionary
3. A Divx Player
4. Speaking and listening sections with a listening dialogues and recording capabilities.

5. A vocabulary section with various types of exercises, games, and tests: In this section students can take part in dialogs and record and listen to their own voices.

6. A section that covers the entire main course books from beginner level to advanced level.

This study was conducted in the spring semester, 2004. The questionnaires were administered and the interviews were carried out in the last week of March. The participants were students and teachers of the Preparatory School of CBU. This semester only twelve teachers are participating in laboratory classes. On the other hand, all the instructors had experience of CALL last year.

The pilot study was also held at CBU in the early March. Fifty students and five teachers took part in the piloting procedure. After the piloting, minor changes to improve the questionnaires were made. The questionnaires were distributed to the students of two classes from each level in late March. Students were selected according to their levels. In all, one hundred and ninety-one students participated in the study. A second questionnaire was distributed to the remaining twenty-two teachers who had not participated in the pilot study. All of the participants completed their questionnaires. After the questionnaires were analyzed, interviews were held with four teachers who have laboratory classes (one from each level). Table 1 and 2 represent the background information of the participants.

Table 1

Background information of students

Sex	F	%
Female	90	47.1
Male	100	52.4
.00	1	0.5
Total	191	100.0

Note: F: frequency, %: percentage, .00: missing data

Level	F	%
A	45	23.6
B	51	26.7
C	59	30.9
D	34	17.8
.00	2	1.0
Total	191	100.0

Note: F: frequency, %: percentage, A: advanced, B: intermediate, C: elementary, D: beginners, .00: missing data.

Table 2

Background information of teachers

Sex	F	%
Female	19	86.4
Male	3	13.6

Note: F: frequency, %: percentage

Age	F	%
20-25	8	36.4
26-30	6	27.3
31-35	5	22.7
36-40	2	9.1
.00	1	4.5
Total	22	100.0

Note: F: frequency, %: percentage, .00: missing data

Years of Teaching Experience	F	%
Less than 1 year	5	22.7
1-4	5	22.7
5-8	5	22.7
9-12	4	18.2
13+	3	13.6
Total	22	100.0

Note: F: frequency, %: percentage

Instruments

In order to gather data about the attitudes of students and teachers about the use of CALL in language instruction three instruments were employed in this study: Two questionnaires and an interview protocol. The first questionnaire was designed to elicit information about the attitudes of students towards CALL use. The other questionnaire was designed to elicit information about the attitudes of teachers and the use of CALL. The third instrument was a structured interview protocol.

Questionnaires

For use in the study: Two questionnaires were designed, one questionnaire for students and the other for teachers. These questionnaires were the first phase of gathering data. The questionnaires were composed of Likert-scale items, open-ended and multiple-choice items since these types of items are a useful and effective means of gathering data about people's attitudes and opinions (O' Maley & Chamot, 1990; Turner, 1993). In developing the questions for the questionnaires, I drew heavily on the existing literature that looked at student and teacher attitudes towards computer use (Arkin, 2003; Pekel, 2002; Tuzcuoğlu, 2000). [I made necessary adaptations according to the context in which the questionnaires would be used.]

The questionnaires were composed of five sections. The first part dealt with background information of the participants (ages and level for students; age, years of teaching experience, and whether they were teaching in a computer laboratory for the teachers). The second section was about general attitudes towards the use of CALL in language learning and teaching. In this section, students and teachers responded to multiple-choice questions to indicate their purposes for using computers and how often they used computers. The third section investigated opinions about the content of the computer program in the Preparatory School at CBU. In this section, a four-

point Likert-scale ('Strongly Agree', 'Agree', 'Disagree' and 'Strongly Disagree') was used to gather data. The fourth section was designed to investigate students' and teachers' opinions about the application of CALL programs in a computer laboratory at the preparatory school. This section used similar Likert-scale items. Finally, in the fifth section, the factors affecting students' and teachers' use of CALL programs were investigated. In order to investigate these factors this section included several multiple-choice items. Table 3 shows the content and number of questions on the two questionnaires for each section.

Table 3

Distribution of questions on the questionnaires

Sections	Section I	Section II	Section III	Section IV	Section V	
Question Types	Background Information	General Attitudes towards computers and computer resources in language instruction	Opinions about the content of the CALL program	Opinions about the application of the CALL program	Factors affecting students' and teachers' use of CALL	
NQ	S	2	3	8	6	7
	T	6	3	8	8	8

Note: NQ: number of questions

For students' questionnaire, Question 2 in Section 2 consists of 9 items and question 3 consists of 13 items.

For teachers' questionnaire, Question 2 in Section 2 consists of 11 items and question 3 consists of 14 items.

In order to check the reliability and validity of the questionnaires, a pilot study was conducted at the Preparatory School of CBU. Students and teachers' responses helped me in making the necessary changes in the questionnaires. The respondents were five teachers and fifty students. While piloting, respondents were asked to indicate any unclear parts in the questionnaires and how much time was needed to complete the questionnaires.

Interviews

In order to gather concrete data about the use of CALL programs in the Preparatory School at CBU and to get in-depth responses, I conducted interviews with four teachers who are currently teaching in a computer laboratory. The questions for the interviews paralleled the sections in the questionnaire.

Procedures

In order to conduct the study a letter requesting the necessary permission for data collection was sent to the administration of the School of Foreign Languages in January. The department head also sent a letter that indicated her approval of the request. The questionnaire for teachers was distributed on March 29, 30 and 31, 2004. The students' questionnaire was distributed on the same days by their teacher. The interviews were held on April 1 and 2, 2004.

Data Analysis

All the items in the questionnaires were analyzed using the Statistical Packages for Social Sciences (SPSS) Version 9.0 except the two open-ended questions in Sections 2 and 5. These two questions were analyzed through categorization of the responses. Frequencies, percentages and the means were calculated for each item. For students' and teachers' attitudes towards the use of CALL in learning and teaching, Chi-square, One-way ANOVA test and Mann-Whitney Test were applied to establish whether there was a difference among the participants in terms of their levels, gender and teaching experience. A Chi Square Crosstabs was applied to find whether there were similarities or differences between the attitudes of teachers and students towards the use of CALL. Interviews were taped and transcribed by the researcher. The transcript data was categorized according to the three sections of the teachers' questionnaire: general attitudes,

content of the program and the application of the program. Responses to these sections were analyzed on a cross-sectional basis (Mason, 1996) and a matrix was formed.

Conclusion

This chapter gives the general information about the setting, participants, instruments and the procedures of the study. In the next chapter, the data analysis and the findings will be discussed in detail.

CHAPTER IV: DATA ANALYSIS

Introduction

This study explored the attitudes of students and teachers at the Preparatory School of Celal Bayar University (CBU) towards computers and the use of CALL programs in language instruction. The study specifically examined how students and teachers perceive and make use of CALL package programs as part of the curriculum in language instruction and their possible classroom implementations.

The study aimed to provide information about how students and teachers perceive use of computer technology resources in language learning and teaching by investigating the attitudes of students and teachers towards the use of CALL and computers in general, and the factors that affect their use of CALL program at the Preparatory School of CBU. Finally, the study investigated the similarities and differences between the attitudes of students and teachers towards the use of CALL.

The study addressed the following research questions:

- 1) What are the Celal Bayar University students' attitudes towards the use of computers as assisted materials for classes?
- 2) What are Celal Bayar University teachers' attitudes towards the use of computers as assisted materials for classes?
- 3) What similarities and differences are there between the attitudes of students and teachers towards the use of CALL?
- 4) Do differences in students' attitudes towards the use of CALL differ along gender and level lines?

Data Analysis Procedure

All the questions in the questionnaires were analyzed using A Pearson Chi-square Test, ANOVA Test and a Mann-Whitney Test except for two open-ended response items in sections two and five and the multiple response items in section five. The Statistical Packages for Social Sciences (SPSS) Version 9.0 was used to compute frequencies and percentages for each Likert-scale question. A Pearson Chi-square test was used to investigate whether there was any significant difference between the attitudes of students and teachers towards the use of CALL. In addition, for the data collected from students' questionnaires, a Chi-Square Test, a Mann-Whitney Test, T-tests and One-way ANOVAs were calculated in order to investigate whether there were any differences in attitudes between different groups, including sex and levels. For the teachers' data, the researcher used the same tests, with the number of years of teaching experience. Serving as the variable the interview transcript data gathered from the teachers was analyzed through a matrix that focused on the similarities and differences between the problems experienced by the four interviewees.

The results gathered from the analysis of the two questionnaires were analyzed by considering the four sections in both questionnaires. These sections were: participants' general attitudes towards computers, their opinions about the content of the CALL program, the application of CALL at CBU, and the factors affecting students' and teachers' attitudes towards the use of CALL programs. After the relevant issues in each questionnaire had been evaluated separately, a comparison was made between the results of students and teachers' questionnaires in order to discover whether there were any similarities or differences in terms of their respective attitudes towards CALL programs. Within this evaluation process, factors

which were thought to have an effect on the views of both groups were considered. Finally, the interview data gathered from teachers was also taken into consideration.

General Attitudes of Students and Teachers towards Computers

The questions in section two of the questionnaire aimed to investigate students' and teachers' attitudes towards computers in general and the use of computers in second language instruction. There were three questions in this section. The first question was a selected response type about how frequently participants used computers in daily tasks. This question included four items: 1= once a week, 2= 1-2 times a week, 3= 3-4 times a week, 4= 5 or more times a week. For each item, frequencies and percentages were computed. The results are presented in Table 4 below.

Table 4
Frequencies and percentages of use of computers in daily tasks

Question Item 1	Participants	F	%
1. Once a week	Students	25	13.1
	Teachers	3	13.6
2. 1-2 times a week	Students	4	28.3
	Teachers	4	18.2
3. 3-4 times a week	Students	43	22.5
	Teachers	9	40.9
4. 5 or more times	Students	67	35.1
	Teachers	6	27.3
Total	Students	190	99.0
	Teachers	22	100.0

Note: F: frequency, %: percentage

Question Item 1: How often do you use computers?

Figures may not add up to 100% because of missing data.

The table above shows that 22.5% of the students use computers more than 3-4 times a week and 35 % of the students use computers 5 or more times a week. The results show that the rest of the students use computers only once or twice a week. According to the teachers' data, the results show that generally most of the teachers use computers four or more times a week with 41% of the teachers stating

that they use computers more than 3-4 times a week and 27% of the teachers stating that they use computers 5 or more than 5 times a week.

The second question was composed of nine multiple response items to be ticked for students and eleven items for teachers, including an *other* option. This question aimed to investigate what students and teachers use computers for. They were asked to indicate their frequency of use (i.e. 0=never, 1=rarely, 2=sometimes, 3=often). For each item a Chi-Square Test was applied and frequencies were computed. The results are presented in Table 5.

Table 5

Purposes and frequency of computer use of students

Option	N		R		S		O		χ^2
	F	%	F	%	F	%	F	%	
Q2a	49	25.7	31	16.2	40	20.9	71	37.2	18.48*
Q2b	55	28.8	31	16.2	52	27.2	53	27.7	7.93
Q2c	154	80.6	26	13.6	7	3.7	4	2.1	321.18*
Q2d	88	46.1	43	22.5	49	25.7	11	5.8	62.71*
Q2e	36	18.8	21	11.0	64	33.5	70	36.6	33.77*
Q2f	99	51.8	42	22.0	27	14.1	23	12.0	77.54*
Q2g	65	34.0	25	13.1	46	24.1	55	28.8	18.23*
Q2h	162	84.8	20	10.5	3	1.6	6	3.0	367.93*

Note: N: never, R: rarely, S: sometimes, O: often, f: frequency, %: percentage, X2: Chi-Square, *p<.05

Question item: What do you use computers for? Indicate your frequency of use.

Q2a: electronic mail

Q2b: games

Q2c: online shopping

Q2d: doing assignments

Q2e: surfing the Internet

Q2f: chat rooms

Q2g: entertainment

Q2h: web page design

The results show that there is a statistically significant difference among the responses of participants. According to the table above 37% of the students state that they often use e-mail and 21% of the participants state that they sometimes use e-mail. The table also shows that 26% of the participants never use e-mail and 16% of them state that they rarely use e-mail. For Q2c and Q2h, 85 % of the students say

that they never use online shopping or web page design programs. The researcher thinks that the reason why 85% of the participants do not use online shopping and web page design may arise from their lack of trust for online shopping and lack of knowledge for designing a web page.

There were ten students who reported the use of computers for other purposes by filling the *other* option. All of them stated that they used computers to listen to music and watch films. Two of the students stated that in addition to watching films and listening to music, they used computers for online banking.

Table 6 represents the data collected from teachers' questionnaires for the same items.

Table 6

Purposes and frequency of computer use of teachers

Option	N		R		S		O		χ^2
	F	%	F	%	F	%	F	%	
Q2a	0	00.0	3	13.6	3	13.6	16	72.7	15.36*
Q2b	8	36.4	11	50.0	3	13.6	0	00.0	4.45
Q2c	3	13.6	7	31.8	2	9.1	0	00.0	8.27
Q2d	7	31.8	5	22.7	7	31.8	3	13.6	2.00
Q2e	5	22.7	1	4.5	9	40.9	7	31.8	6.36
Q2f	3	13.6	3	13.6	8	36.4	8	36.4	4.54
Q2g	2	9.1	2	9.1	3	13.6	15	68.2	22.00*
Q2h	9	40.9	4	18.2	3	13.6	6	27.3	3.81
Q2i	12	54.5	8	36.4	2	9.1	0	00.0	6.90
Q2j	9	40.9	7	31.8	5	22.7	1	4.5	6.36

Note: N: never, R: rarely, S: sometimes, O: often, f: frequency, %: percentage, X2: Chi-Square, *p<05
Question item: What do you use computers for? Indicate your frequency of use.

Q2a: electronic mail

Q2b: games

Q2c: online shopping

Q2d: material design

Q2e: typing and maintaining lesson plans, office work, students' records, administrative reports

Q2f: surfing the Internet

Q2g: assigning and checking assignments via e-mail

Q2h: chat rooms

Q2i: entertainment

Q2j: web page design

The results indicate that teachers often use computers for electronic mail, (73%) and assigning and checking assignments via e-mail (68%). In addition, surfing

the Internet and lesson planning are also frequent activities for the participants. The table above shows that 36.4% of the participants ticked the *sometimes* and *often* option on surfing the Internet. However, the use of computers for games, online shopping, entertainment and web-page design are not very common among teachers since 86.4% of the participants ticked either *never* or *rarely* options for playing games on a computer, and only 9% of the participants stated that they *sometimes* do online-shopping. The researcher may predict that the participants did not use online shopping because of their lack of trust in online shopping. The table above also shows that 55% of the participants never use and 36.4% of them stated that they rarely use computers for the purposes of entertainment. For this question, the researcher thinks that the participants may misinterpret what was meant by ‘entertainment’ since a number of teachers reported the use of computers for other purposes, such as listening to music and watching films, which might be called ‘entertainment’. One of the teachers ticked the *other* option and stated that she used computers for academic research, in particular reading online journals by ticking the other option.

Comparison of Data Gathered from Questionnaires of Students and Teachers for Section II Question 3

The third question was composed of thirteen Likert-scale items. The options were ‘1=Strongly Agree’, ‘2=Agree’, ‘3=Disagree’ and ‘4=Strongly Disagree’. The question aimed to gather information about students’ and teachers’ attitudes towards computer use in general and in particular the use of computers for language instruction. In Table 7 frequencies, percentages and Chi-Square Test results for questions common to both questionnaires are presented.

Table 7

Attitudes of students and teachers towards computer use in general and in language instruction.

Options	P	SD		D		A		SA		χ^2 %
		F	%	F	%	F	%	F	%	
Q3a	S	2	1.0	8	4.2	80	41.9	101	52.9	3.85
	T	0	0.0	3	13.6	9	40.9	10	45.5	
Q3b	S	8	4.2	3	1.6	79	41.4	101	52.9	8.83
	T	0	0.0	2	9.1	13	59.1	7	31.8	
Q3c	S	12	6.3	62	32.5	79	41.4	37	19.4	8.41
	T	0	0.0	2	9.1	15	68.2	5	22.7	
Q3e	S	16	8.4	52	27.2	81	42.4	40	20.9	17.86*
	T	0	0.0	1	4.5	8	36.4	13	59.1	
Q3f	S	7	3.7	25	13.1	77	40.3	81	42.4	7.75
	T	0	0.0	0	0.0	9	40.9	12	54.5	
Q3h	S	11	5.8	27	14.1	89	46.6	60	31.4	4.8
	T	1	4.5	0	0.0	14	63.6	7	31.8	

Note: P: participants, S: students, T: teachers, SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, F: frequency, %: percentage, χ^2 : Chi-Square, * $p < .05$

Q3a: I like using computers.

Q3b: I generally have positive attitudes towards computers

Q3c: Using computers makes me more efficient in my life.

Q3e: Using computers generally makes completing tasks easier.

Q3f: I like searching the Internet for general interest.

Q3h: I generally have positive attitudes towards using computers in language instruction.

The responses given to Q3a indicate that most students and teachers generally like using computers with over 90% of both students and teachers either 'agreeing' or 'strongly agreeing'. In addition, the data collected from 3e and 3f show that 83% of the students and 96% of the teachers indicated that they like searching the Internet for general interest. The results of 3f indicated that 78% of the students and 96% of the teachers generally have positive attitudes towards using computers in language instruction. On the other hand, the results show that there is a significant difference between students and teachers concerning whether computers make completing tasks easier since 63% of the students and 95% of the teachers stated that computers make

completing tasks easier either by agreeing or strongly agreeing. While only 4.5% of the teachers disagreed that computers made completing tasks easier, 35% of the students either disagreed or strongly disagreed with this question.

In addition, 67% of the students either by disagreeing or strongly disagreeing reported that using computers does not make them more efficient in the classroom while 96% of the teachers stated that using computers makes them more efficient at work.

Data Gathered from Students' Questionnaire

There were several questions that asked students to give their opinions on the CALL program used at the Preparatory School of CBU. For this data, the researcher applied an Independent T-test in order to investigate whether there were differences between the participants considering their gender and levels. The test result was found to be 0.868, which is not significant at the .05 level. Thus, the researcher found that there was no gender difference between the responses of the participants. The results are shown in Table 8.

Table 8

Gender difference among the participants towards general computer use and their use in language instruction.

Gender	N	M	sd	t
Female	90	38.30	5.68	.868
Male	100	38.44	5.91	

Note: N: number, M: mean, sd: standard deviation, t: T-Test

In order to investigate whether there was a difference among the participants considering their levels, the researcher applied a One-way Anova Test. This indicated a significant result since it was found to be 0.02. In order to find which groups show differences a Tukey HDS Test was applied. The results are shown in Table 9.

Table 9

Level differences towards general computer use and their use in language instruction

Level	Level	N	S	F
B	A	45	.991	2.932*
	C	59	.460	
	D	34	.050*	
C	A	45	.788	
	B	51	.050*	
	D	34	.671	

Note: N: number, S: significance, F: Variance, A: advanced level, B: intermediate, C: elementary, D: beginner, *p<.05

The results show that there is a significant difference in levels B and C. It is tempting to speculate that this difference may be related to language ability. It is possible that since level B students have a higher language ability than C level students, they may be more comfortable using computers. The question related to students' attitudes towards the use of computers in language instruction indicates that 66 % of the students perceive computers as good instruments to support language learning. The mean score of the responses that were given to the question 'Computers are good instruments to support language learning' indicate that the question S2Q3i cluster around 3.00, between *agree* and *strongly agree*. When the researcher looked at the students' responses to the question 'I think I need training to use computers effectively', the percentages show that 27% of the students ticked the 'strongly agree' option and 39% of the students ticked the 'agree' option. On the other hand, 15% of the students stated that they were 'strongly disagree' and 20% of the students stated that they were 'disagree' with that option. Thus, 66% of the students either agree or strongly agree that they need training to use computers effectively. The results are shown in Table 10.

Table 10

Students' opinions about computer use

Question	SD F	D F	A F	SA F	M
S2Q3i	9(4.7)	34(17.8)	96(50.3)	52(27.2)	3.00
S2Q3m	51(26.7)	74(38.7)	38(19.9)	28(14.7)	2.22

Note: SD: strongly disagree, D: disagree, A: Agree, SA: strongly agree, M: mean, F: frequency
 S2Q3i: Computers are good instruments to support language learning.
 S2Q3m: I think I need training to use computers effectively.
 Values in parenthesis represent percentages.

Data Gathered from Teachers' Questionnaire

For the data collected from teachers' questionnaires in order to investigate their attitudes towards computer use in language instruction, the researcher found frequencies and percentages for the questions that are different from the ones in Table 6. These questions were about whether computers were a good supplement for teaching purposes, whether training was required to teach with computers and whether the participants felt they themselves needed training in order to teach with computers. The results are shown in Table 11.

Table 11

Attitudes of teachers towards computer use in language instruction and their opinions about training.

Question item	SD		D		A		SA	
	F	%	F	%	F	%	F	%
S2Q3i	0	0.0	2	9.1	14	63.6	6	27.3
S2Q3k	0	0.0	0	00.0	10	45.5	12	54.5
S2Q3m	0	0.0	2	9.1	12	54.5	8	36.4
S2Q3n	0	0.0	4	18.2	13	59.1	5	22.7

Note: SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, f: frequency, %: percentage
 S2Q3i: I like using computers for teaching purposes.
 S2Q3k: Computers can be a good supplement to support language teaching.
 S2Q3m: I believe that training is required to teach with computers.
 S2Q3n: I think that I need training to teach with computers.

The results show that 90% of the teachers like using computers for teaching purposes. The table above shows that 90% of the participants think training is

required in order to teach with computers. In addition, since 59% of teachers chose *agree* and 23% chose *strongly agree*, it is clear that most of the teachers believed that they are in need of training to teach with computers. The next section of the chapter will present the results and findings from Section 3 of the questionnaires of students and teachers.

Students' and Teachers' Opinions about the Content of the CALL Program at the Preparatory School of CBU

This section was concerned with students' and teachers' opinions about the content of the CALL program used at the Preparatory School of CBU. Section 3 consisted of eight Likert-scale items. The options were '1=Strongly Agree', '2=Agree', '3=Disagree' and '4=Strongly Disagree'. All the questions in this section for both questionnaires were the same. Frequencies and percentages and Pearson Chi-Square are presented in Table 12.

Table 12

Students' and teachers' perceptions about the content of the CALL program

Q	P	SD		D		A		SA		χ^2 %
		F	%	F	%	F	%	F	%	
Q1	S	16	8,4	56	29.3	98	51.3	20	10.5	16.77*
	T	0	0.0	1	4.5	13	59.1	8	36.4	
Q2	S	41	21.5	70	36.6	67	35.1	12	6.3	2.21
	T	3	13.6	11	50.0	6	27.3	2	9.1	
Q3	S	31	16.2	69	36.1	67	35.1	23	12.0	18.89*
	T	0	0.0	7	31.8	5	22.7	10	45.5	
Q4	S	12	6.3	22	11.5	106	55.5	51	26.7	32.03*
	T	0	0.0	0	0.0	3	13.6	19	86.4	
Q5	S	13	6,8	44	23.0	96	50.3	36	18.8	2.71
	T	0	0.0	4	18.2	12	54.5	6	27.3	
Q6	S	5	2.6	15	7.9	108	56.5	59	30.9	18.91*
	T	0	0.0	0	0.0	5	22.7	17	77.3	
Q7	S	22	11.5	70	36.6	83	43.5	16	8.4	7.70
	T	0	0.0	4	18.2	15	68.2	3	13.6	
Q8	S	25	13.1	53	27.7	92	48.2	21	11.0	16.87*
	T	0	0.0	1	4.5	13	59.1	8	36.4	

Note: Q: question, P: participants, S: students, T: teachers, SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, F: frequency, %: percentage, χ^2 : Chi-Square, * $p < .05$

Q1: The CALL program is beneficial in improving reading skills.

Q2: The CALL program is beneficial in improving writing skills.

Q3: The CALL program is beneficial in improving speaking skills.

Q4: The CALL program is beneficial in improving listening skills.

Q5: The CALL program is beneficial in improving grammar.

Q6: The CALL program is beneficial in improving vocabulary knowledge.

Q7: Reading passages on the computer program are easy to understand.

Q8: The CALL program offers choices while studying.

The results show that there are significant differences between the responses students and teachers gave to Q1, Q3, Q4, Q6 and Q8. When students were asked whether the CALL program was beneficial in improving their reading skills, 8% stated that they strongly disagreed and 29% stated that they disagreed. On the other hand, none of the teachers stated that they strongly disagreed and only 4.5% said that

they disagreed. Since there is no teacher selected the *strongly disagree* and only one respondent chose *disagree*, the difference may rise from this distribution on the options. The results may suggest that students who remain closer to *disagree* may find reading passages on the computer program easy and uninteresting since 62% of the participants either *agreed* or *strongly agreed* with this question. The qualitative data gathered from *other factors* option in Section 5 (factors affecting students' use of CALL programs) indicated that 65% of the A and B level students found the reading passages on computer program easy and uninteresting.

Responses to Q4 also indicate a significant difference between students and teachers. Although 82% of the students either agreed or strongly agreed that the CALL program is beneficial in improving listening skills, 18% of the students chose either *disagree* or *strongly disagree*. On the other hand, none of the teachers indicated that they disagreed or strongly disagreed with the question.

The responses to Q6 and 8 also reveal a significant difference between the two groups. For these questions the distribution of the responses were similar to questions 1.3 and 4. The overall mean scores of students (2.68) and teachers (3.22) indicate that they have positive attitudes towards the content of the CALL program.

The next section of the chapter will present the results and findings from Section 4 of the questionnaires of students and teachers. This section concerned students' and teachers' perceptions of the application of the CALL program at the Preparatory School of CBU.

Students' and Teachers' Perceptions of the Application of CALL Program at the Preparatory School of CBU

This section was composed of six Likert-scale items for the students' questionnaire and eight Likert-scale items for the teachers' questionnaire. The options were '1=Strongly Agree', '2=Agree', '3=Disagree' and '4=Strongly Disagree'. Since the number of items and the content of the items are not the same, a Chi-Square Test could not be run. Consequently, the data collected from the questionnaires was analyzed separately. The researcher calculated the overall means and ran a Pearson Chi-Square. Table 13 presents the results of data collected from the students' questionnaire.

Table 13

Students' Perceptions of the application of the CALL program at the Preparatory School of CBU

Qs	00		SD		D		A		SA		χ^2
	F	%	F	%	F	%	F	%	F	%	
Q1	0	0.0	19	9.9	61	31.9	80	41.9	28	14.7	163.06*
Q2	1	0.5	37	19.4	40	20.9	73	38.2	40	20.9	68.13*
Q3	5	2.6	31	16.2	51	26.7	70	36.6	34	17.8	61.43*
Q4	1	0.5	35	18.3	58	30.4	62	32.5	35	18.3	61.85*
Q5	1	0.5	25	13.1	70	36.6	66	43.6	29	15.2	89.70*
Q6	0	0.0	15	7.9	30	15.7	71	37.2	75	39.3	55.93*

Note: .00: missing data, SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, F: frequency, %: percentage, χ^2 : Chi-Square, * $p < .05$

Q1: I can use my time effectively in accomplishing the tasks on the computer.

Q2: My teacher gives me effective guidance in the computer laboratory.

Q3: My teacher manages lessons in the computer laboratory effectively.

Q4: My teacher deals effectively with each individual student in laboratory sessions.

Q5: In computers sessions I can understand the reasons for mistakes better than I do in class.

Q6: While studying on my own in laboratory sessions, I feel more comfortable than studying in class.

The results of the Chi-Square Test show that there are significant differences among the responses of the participants. In order to find out the reasons for these differences a number of tests such as One-way ANOVA and Tukey Test were conducted. The results are shown in Tables 14 and 15.

Table 14

Groups differing from each other in terms of levels

Options	Level	N	Level	N	S	V
Q2	A	45	D	34	.002	10.07*
	B	51	C	59	.000	
			D	34	.000	
	C	59	B	51	.000	
			D	34	.002	
Q3	B	51	C	59	.000	12.57*
			D	34	.000	
	C	59	B	51	.000	
			D	34	.000	
	Q4	B	51	C	59	
D				34	.000	
B				51	.000	
Q6	A	45	D	34	.002	3.71*
			D	34	.002	
	D	34	A	45	.002	

Note: N: number, S: significance, V: Variance, A: advanced level, B: intermediate, C: elementary, D: beginner

Q2: My teacher gives me effective guidance in the computer laboratory.

Q3: My teacher ménages lessons in the computer laboratory effectively.

Q4: My teacher deals effectively with each individual student in laboratory sessions.

Q6: While studying on my own in laboratory sessions, I feel myself more comfortable than studying in class.

The results show that for the Q2 there is a significant difference between the A and D levels, B and C levels, and B and D levels. For the other two questions Q3 and Q4 there is a significant difference between B and C levels, and B and D levels. For Q6 the results indicated that the difference was between A and D levels. As a further analysis in order to see the distribution of responses according to levels, the researcher ran a Crosstab analysis: Chi-Square. Table 15 presents the results.

Table 15

Distribution of responses according to the level of students

Option L		SD F	D F	A F	SA F	N F
Q2	A	4	8	23	10	45
	B	4	4	24	19	51
	C	14	17	22	5	58
	D	14	10	4	6	34
Q3	A	3	13	19	9	44
	B	2	4	29	16	51
	C	12	19	18	6	55
	D	13	14	4	3	34
Q4	A	6	11	17	11	45
	B	2	8	25	16	51
	C	6	22	16	4	58
	D	11	15	4	4	34
Q6	A	2	5	14	24	45
	B	2	8	18	23	51
	C	4	9	26	20	59
	D	7	7	13	7	34

Note: L: level, SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, N: number, F: frequency.

Q2: My teacher gives me effective guidance in the computer laboratory.

Q3: My teacher manages lessons in the computer laboratory effectively.

Q4: My teacher deals effectively with each individual student in laboratory sessions.

Q6: While studying on my own in laboratory sessions, I feel myself more comfortable than studying in class.

Figures may not add up to total numbers because of missing data.

For Q2, 73% of the A level students either agreed or strongly agreed that their teachers gave effective guidance in a computer laboratory. However, 71% of the D level students disagreed with that question either by choosing *disagree* or *strongly disagree* options. The results indicated a significant difference. The researcher interprets the difference among responses as reflecting the fact that D level students may expect more individual attention and guidance from their teachers since they are beginners. In addition, they may be in need of training for the effective use of CALL programs. For Q3 and Q4 the differences between the ‘B and C’ and ‘B and D’ levels may be explained as follows: Since C levels of students are elementary students and

D levels of students are beginners they may need more guidance while studying on their own. Furthermore, they may have high expectations from both their teachers and the program and they may not be sufficiently autonomous to learn on their own. In addition, they may expect the same behavior from their teachers in computer sessions as in class sessions. Thus, the respondents may think that their teachers are not as good at managing computer sessions as they are in class.

Finally, the researcher calculated the overall mean score of the responses given to this section. The overall mean score of 2.66 for data collected from students' questionnaire Section 4 indicates that students may have positive attitudes towards the application of the CALL program since they remain closer to agree.

Perceptions of the Teachers of the Application of the CALL Program at the Preparatory School of CBU

In order to collect data for the perceptions of teachers about the application of the CALL program at the Preparatory School of CBU, the researcher calculated the overall means and ran a Pearson Chi-Square Test. Table 16 presents the data from the teachers' questionnaire, Section 4.

Table 16

Teachers' perceptions of the application of the CALL program at the Preparatory School of CBU

Options	SD		D		A		SA		χ^2
	F	%	F	%	F	%	F	%	
Q1	0	0.0	5	22.7	13	59.1	4	18.2	6.63
Q2	0	0.0	1	4.5	5	22.7	16	72.7	16.45*
Q3	0	0.0	3	13.6	9	40.9	10	45.5	3.90
Q4	0	0.0	1	4.5	3	13.6	18	81.8	23.54*
Q5	0	0.0	1	4.5	13	59.1	8	36.4	9.90
Q6	1	4.5	7	31.8	12	54.5	2	9.1	14.00*
Q7	1	4.5	16	72.7	4	18.2	0	0.0	27.81*
Q8	1	4.5	12	54.5	7	31.8	1	4.5	22.54*

Note: SD: strongly disagree, D: disagree, A: agree, SA: strongly agree, F: frequency, %: percentage, χ^2 : Chi-Square, * $p < .05$.

Q1: The CALL programs can be used to teach grammar to support students' learning.

Q2: The CALL programs can be used to teach vocabulary to support students' learning.

Q3: The CALL programs can be used by students in practicing grammar to support their learning.

Q4: The CALL programs can be used by students in practicing vocabulary to support their learning.

Q5: Students' interest in learning a language will increase by using computers.

Q6: I like teaching with computers.

Q7: I can monitor my students progress in a computer laboratory better than in class.

Q8: I believe students can learn more from computers than from books.

Figures may not add up to 100% because of missing data.

The results indicate that there are significant differences among the responses on Q2, Q4, Q6, Q7 and Q8. While 96% of the participants stated that computer programs could be used to teach and practice vocabulary to support students' learning, only 4.5% stated they disagreed. Moreover, 64% of the participants stated that they liked teaching with computers and 36% stated that they disagreed.

In order to find whether there was an effect of teaching experience on the responses, the researcher did a further analysis and ran a One-way ANOVA Test. However, the results show that there was no significant difference between the participants in terms of their teaching experience.

Finally, the researcher calculated the overall mean. The overall mean score for Section 4 of the teachers' questionnaire indicates that teachers also may have positive attitudes towards the application of the program, with a mean score of 3.00.

Factors Affecting Students' Use of CALL Programs in Language Learning

The last section on both questionnaires was designed to elicit students' perceptions about the factors affecting their use of CALL programs in language learning. There were seven multiple response type questions, all of which include the option of 'other factors'. The researcher first analyzed the data gathered from this section through frequencies and percentages. Table 17 presents the results.

Table 17

Factors affecting students' attitudes towards the use of CALL in language instruction

Question	Ticked		Not Ticked		Total
	F	%	F	%	
S5A	115	60.2	76	39.8	191
S5B	95	49.7	96	50.3	191
S5C	86	45.0	105	55.0	191
S5D	98	51.3	93	48.7	191
S5E	103	53.9	88	46.1	191
S5F	98	51.3	93	48.7	191

Note: F: frequency, %: percentage

S5A: I believe I need training in using software programs in learning language.

S5B: I believe I need training in using software programs in practicing language.

S5C: I think our teachers' instructions in laboratory sessions are satisfactory.

S5D: The time that we spend in a computer laboratory is not enough to cover all the topics on the curriculum.

S5E: The design of the laboratory affects positively my learning with computers.

S5F: My teachers' attitudes towards CALL in language instruction positively affect my learning in a computer laboratory.

The results indicate that 60% of the participants felt that their need for training to use software programs in learning a language affected how they learned with computers. Furthermore, 50% indicated their need for training in using software programs in practicing the language. According to the table above 45% of the participants found the instructions of their teachers to be important for their learning, and 51% thought that the time that was allocated for computer sessions was not enough and negatively affected them. The above table also indicates that 54% of the students believed they were positively affected by the design of the laboratory while

learning with computers. Finally, 49% of the participants stated that their teachers' attitudes positively affected their learning with computers.

The data gathered from the open-ended question shows that 35% checked *other factors*. In general, most of the students from the A and B levels stated that they found the content of the program easy and not interesting. One of the participants from C level stated that his teacher asked a question at the end of every session. This is interesting because he felt he was required to memorize the parts on the program and he added that this affected his learning. Since the program at CBU does not offer Internet for students, over 90% of the students who checked *other factors* stated that they had to go to Internet cafes in order to do their assignments.

Since, T- tests and One-way ANOVA Tests can be applied to data which represents a normal distribution of responses, and the questions in this section were composed of two-dichotomous variables, *ticked* and *not ticked*, the researcher ran a Mann-Whitney Test, as an alternative to an Independent T-Test to investigate whether there was difference among the responses of participants in terms of their gender. The results indicated that there was no significant difference among the responses of participants in terms of their gender. Table 18 presents the results of the findings.

Table 18

Students differing from each other in terms of gender

Question	SEX	N	MR	Mann-Whitney	S
S5A	F	90	91.28		
	M	100	99.30	4120.00	.23
S5B	F	90	92.89		
	M	100	97.85	4265.00	.47
S5C	F	90	98.39		
	M	100	92.90	4240.00	.42
S5D	F	90	92.28		
	M	100	98.40	4210.00	.37
S5E	F	90	92.11		
	M	100	98.55	4195.00	.35
S5F	F	90	99.78		
	M	100	91.65	4115.00	.24

Note: N: number, MR: mean rank, S: significance.

S5A: I believe I need training in using software programs in language learning.

S5B: I believe I need training in using software programs in practicing language.

S5C: I think our teachers' instructions in laboratory sessions are satisfactory.

S5D: The time that we spend in a computer laboratory is not enough to cover all the topics on the curriculum.

S5E: The design of the computer laboratory affects positively my learning with computers.

S5F: My teachers' attitudes towards CALL in language instruction positively affect my learning in a computer laboratory.

Factors Affecting Teachers' Use of CALL Programs in Language Teaching

This section was designed to elicit teachers' perceptions about the factors affecting their use of CALL programs in language teaching. There were eight multiple response type questions, including the option of 'other factors', which offered multiple options to the respondents. Teachers could elect to tick or not tick each item that applied. In order to analyze the data collected from this section, the researcher calculated the frequencies and percentages. Table 29 presents information about the options preferred by the respondents.

Table 19

Factors affecting teachers' attitudes towards the use of CALL in language instruction

Question	Ticked		Not Ticked		Total
	F	%	F	%	
S5A	14	64	8	36	22
S5B	10	46	12	55	22
S5C	12	55	10	46	22
S5D	8	36	14	64	22
S5E	4	18	18	82	22
S5F	15	68	7	32	22
S5G	14	64	8	36	22

Note: F: frequency, %: percentage

S5A: I believe I need training in guiding students in the use of software for learning a language.

S5B: I believe I need training in guiding students in use of software programs in practicing language.

S5C: I believe I need training in planning lessons in a computer laboratory.

S5D: I believe the curriculum that we use for CALL in language instruction is satisfactory.

S5E: The time that we spend in a computer laboratory is not enough to cover all the topics on the curriculum.

S5F: The design of the computer laboratory affects positively my teaching with computers.

S5G: Students' attitudes towards CALL in language instruction affect my teaching in a computer laboratory.

The results indicate that 64% of the teachers believe that their need of training in guiding students in the use of software for learning a language affects their teaching. Moreover, 55% stated that their need of training in planning their lessons for computer sessions also affected their teaching. As it is seen from the table 36% of the teachers indicated that the curriculum being satisfactory was an influence on their teaching. In addition, 82% thought that the time that they spent in a computer laboratory was insufficient to cover all the topics on the curriculum and that this affected how they taught. The table also shows that 68% believe that the design of the computer laboratories positively affected their teaching. Finally, 64% of the teachers thought that the attitudes of students towards the use of CALL in language instruction directly affected their way of teaching.

There are only three teachers who gave comments about the other factors that affect their attitudes towards the use of CALL in language instruction. Two of the participants stated that a crowded computer laboratory negatively affects their

teaching with computers. One of them added that class hours and hours of computer classes had to be well organized. One of the participants stated that they needed a qualified member of staff in case of emergency and to load software programs. She added that technical problems negatively affected her teaching with computers.

Analysis of the Interviews

In order to investigate the perceptions of teachers regarding the use of CALL in more depth, the researcher conducted interviews with four teachers from different levels. The transcripts of the data were analyzed through a matrix which organized teachers' opinions into such issues as lack of training, the need for training, lack of curriculum, teaching grammar and writing through computers and problems in managing students in computer sessions.

In the interviews, all the interviewees pointed out that training is essential in order to teach with computers. Three of the interviewees gave reasons why they thought that training is essential. One of them stated that in general most of the teachers use computers for daily purposes; however, often they lack experience in teaching with computers. Two of them pointed to specific areas where they felt they needed training. One of them stated that she needed training to teach writing and speaking classes. She stated that the software programs did not offer students many opportunities to practice writing and speaking skills.

I think it is essential because most of the teachers use computers only for daily purposes like using Internet or only preparing our exam questions. I think we have to take some training for it. At first, we need training for using computers. Because for example, myself I don't know much about computers. I only use it for sending as I said before, e-mails or reading e-mails or preparing my exam questions. But I don't know anything about using computers or other programs. At first we should take some training about computers and using computers (Interviewee 2).

The other interviewee stated that she often experienced technical problems. She stated that they needed an expert who would load software programs and deal with technical problems.

Absolutely yes. Because all of us cannot be skilled or talented in using computers. Even though I can use it, in my opinion I think I can handle all but I don't know how to use it totally. For example, when the program is out of order I don't know how to fix it or reload it, that's why there should always be a technical person around us when we have lab classes but that is another point about our university, we are having difficulty in finding a technician (Interviewee 4).

Second, all the interviewees pointed out that to use these resources effectively, there should be a curriculum designed for CALL software programs. One of the interviewees stressed that they do not have a curriculum to use computer programs in language instruction. Two of the interviewees stressed that the curriculum should be flexible since CALL programs offer students the choice of studying on their own.

I think that there should be a curriculum and all the lab teachers should cooperate in my opinion for the same level but it should be flexible according to the students, the class, the level, the subject it should be flexible in my opinion (Interviewee 1).

We have a special program and we use and follow it, not written but we have an oral curriculum. Because we didn't want to fix it to a, we don't want to define borders around teaching computer, teaching English by computers so we want to have it free and let the students learn freely we wanted to guide them not strictly to teach something (Interviewee 2).

In addition, one of the interviewees explained how they use CALL programs since they do not have a curriculum.

We do not have a curriculum but, we try to go in parallel with the same classes, a classes go parallel with each other, B classes with B classes, C classes with the others and so on. We try to go parallel with reading classes, main cores and sometimes with the writing classes (Interviewee 4).

The interviewees were also asked whether the computer program helps in improving students' grammar and writing competence in general. Two of the interviewees stressed the importance of teaching grammar in class rather than teaching it with computers and gave reasons for their opinions. While one of the interviewees stated that students might not learn by looking at the computer screen, the other interviewee criticized the way the teachers teach grammar and the reasons why the computer programs may not be beneficial.

In my opinion teaching grammar should be in class. Only they can use computers for practicing or revising grammar points. Only by looking at the computer, in my previous experience and for this year's experience, most of our students tell us 'they can't learn from computers the grammar points' (Interviewee 1).

Grammar, grammar in my opinion grammar should be taught at the first stage that it should follow the speaking and reading skill. What we do is we always teach the grammar, teach it from the deductive to inductive progress but that is wrong, because at the end the students know all about grammar but they do not know how to use it (Interviewee 4).

One of the interviewees stated that she had difficulty in finding writing exercises on the software program.

I cannot find writing exercises very how can I say? Very efficient and not enough exercises. They are just filling the gaps. They don't write full sentences all the time. They just listen, okay, listen and put in the unknown words but they don't practice the actual writing (Interviewee 2).

Lastly, the researcher asked the interviewees whether they had problems in managing the students in computer sessions. Two of the interviewees stated that they did not have any problems in managing the students. However, one of them stated that there may be slow learners and they might have difficulty in using the software programs.

In the labs I don't have any problems, but sometimes there can be some slow learners, and these students may have some problems in catching up with their friends. I don't have any problems in managing the students (Interviewee 3).

One of the interviewees stated that sometimes she might have difficulty in managing the students in computer sessions since some of the students might work on restricted software programs or they might listen to music instead of the dialogues.

First of all the damage that they give to the computers, of course. Apart from that, as I said before, if they decide to do something different and they may also enter some restricted programs they shouldn't enter and we may also have some mechanical problems, like some of the files cannot be read and usually we overcome and solve the problems most of the time (Interviewee 2).

Interviewee 4 stated that the problems that she faced were related to the level of students since different levels of students show different performances in doing tasks.

The problem that I face occurs from the different levels of the students. The hard working students go thorough the programs more easily, but those students that cannot, I may not say the lazy ones, but the ones that cannot understand at the first sight while they are watching. They need to re-watch it or go thorough the programs again to understand it, so when they are doing it for the second time the ones that do it at the first time, they have difficulty because they become bored and they don't want to go through the program again. What they always want from me is "Can I go out or can I miss the class for today". That is only the problem. I don't have an organization problem in the classroom (Interviewee 4).

Briefly, it seems that all the problems that were discussed in the interviews might be solved with training in how to managing students in a computer laboratory, using software programs and by providing technical support. In order to design a curriculum to teach with computers, needs analysis may be conducted.

Conclusion

This chapter presented the data analysis of the students' and teachers' attitudes towards computers, using CALL programs in language instruction, their opinions about the content and application of the CALL program at the Preparatory School of CBU and the factors affecting their use of CALL programs in language instruction. In the next chapter the findings will be discussed in details and in parallel with the findings in the literature.

CHAPTER V: CONCLUSION

Overview of the Study

This study examined how students and teachers perceive use of computer technology resources in language learning and teaching by investigating the attitudes of students and teachers towards the use of CALL and computers in general, the similarities and differences between their attitudes, and factors that affect students' and teachers' use of CALL program at the Preparatory School of CBU. First, two questionnaires were used to collect data about the general perceptions of students and teachers towards computers, their perceptions about the content and application of the CALL program at the Preparatory School of CBU and factors affecting the participants' use of computers in language instruction. Second, possible differences between the attitudes of students and teachers were investigated. Finally, in order to deepen the understanding of teachers' perceptions of using computers in language instruction, interviews were conducted with the teachers.

The research questions answered by this analysis were as follows:

- 1) What are the Celal Bayar University students' attitudes towards the use of computers as assisted materials for classes?
- 2) What are Celal Bayar University teachers' attitudes towards the use of computers as assisted materials for classes?
- 3) What similarities and differences are there between students' and teachers' attitudes towards the use of CALL?

4) Do differences in students' attitudes towards the use of CALL differ along gender and level lines?

This chapter will present and discuss the findings and implications drawn from the results of data analysis in relationship to the literature. The findings will be presented and discussed under four headings. While the results concerning the first two headings are being discussed a comparison will be made between the findings of students and teachers. These four headings are listed as follows:

1- Students' and teachers' general attitudes towards computers and similarities and differences between their attitudes.

2- Students' and teachers' perceptions of the content of the CALL program at the Preparatory School of CBU and similarities and differences between their perceptions.

3- Students' and teachers' perceptions of the application of the CALL program at the Preparatory School of CBU.

4- Factors affecting students' and teachers' attitudes towards the use of CALL in language instruction.

After presenting and discussing the findings, pedagogical implications and limitations of the study will be clarified. Drawing conclusions from this study, suggestions for further research will be made. Finally, the major findings of the study will be summarized.

Discussion of the Results

The findings of data analysis in Chapter IV are discussed in four subsequent sections. The sections below aim to present the findings that address the first, second and the third research questions.

Students and Teachers' General Attitudes towards Computers and Similarities and Differences between Their Attitudes

Section II of both the students' and teachers' questionnaires was designed to explore general attitudes of students and teachers towards computers. The results indicated that computer use for general purposes among students and teachers is very frequent. Most students use computers for e-mail, surfing the Internet and playing games. Most teachers use them for e-mail, typing and maintaining lesson plans, office work, students' records and administrative records and assigning and checking assignments via e-mail. Most participants also reported that they like using computers for general purposes, that using computers makes them more efficient in their lives and that they have positive attitudes towards using computers in language instruction. Such responses are to be expected since computer technology is fast gaining recognition in almost every field including learning and teaching a foreign language (Gruich, 2002; Pennington, 1996).

On the other hand, the great majority of students and teachers stated that they never use online shopping. The researcher thinks that the reason why 85% of the students and 86% of the teachers do not use online shopping may rise from their lack of trust for online shopping. In addition, the results indicated that web page design was not also common among both students and teachers. This may be because of students' and teachers' lack of knowledge for designing a web page. The participants also may not have any training in using computers for these purposes. These

similarities between students' and teachers' use of computers provided useful insights into the third research question.

The results also indicated that 91% of the teachers *never* or *rarely* use computers for the purpose of entertainment. For this question, the researcher thinks that the participants may misinterpret what was meant by 'entertainment' since a number of teachers reported the use of computers for other purposes, such as listening to music and watching films, which might be called 'entertainment'.

When it comes to students' and teachers' opinions about whether computers make completing tasks easier, most teachers agreed with this statement. A number of students; however, indicated that they did not share this opinion with their teachers. This difference might be related to students' levels. Beginners and elementary students may need more guidance and training since they have lower language ability than advanced and intermediate level of students. The findings of this question directly referred to third and fourth research questions of the study.

On the other hand, most students reported that using computers does not make them more efficient in the classroom; most teachers, however, stated that using computers makes them more efficient at work. Possible factors contributing to these findings may be related to instructional programs not being used efficiently in classrooms. Furthermore these findings may reflect a mismatch between classroom practice and practice in computer sessions. In addition, these findings may also arise from students' lack of training in how to learn and teachers' need for training to teach with computers since most students and teachers reported that they need training in order to use computers effectively. This difference between students' and teachers' perceptions about the use of computers provided useful insights into the third research question.

Briefly, all these findings may imply that students and teachers generally have positive attitudes towards computer technology use both in their daily lives and in language instruction. This is consistent with the literature, which suggests that students and teachers need to be trained in how to effectively use this computer technology in language learning and teaching (Ely, 1990; Hoffman, 1997).

Students' and Teachers' Perceptions of the Content of the CALL Program at the Preparatory School of CBU and Similarities and Differences between their Perceptions

Section III of the questionnaires was designed to investigate students' and teachers' perceptions of the content of the CALL program. The results of Chi-square and crosstabs data analysis suggest that there is a statistically significant difference among the responses of the students and the teachers.

The results of the findings indicated that more than half of the students (62%) believe that the CALL program is beneficial in improving reading skills and a great majority of the teachers (95%) that it is effective in improving reading skills. Once again, the findings from students' data, which provided useful insights into the fourth research question, may be related to the level of students since beginners and elementary students may find the reading passages difficult due to their low language ability and they may also not be aware of what was meant by reading skills, such as skimming and scanning. However, since the teachers were more conscious about the benefits of computers in improving reading skills their perceptions were more positive. This interpretation may also be supported by findings in the literature (Beatty, 2003; Healey, 1999; Jones & Fortescue, 1987). Healey (1999) states that since computer programs offer students the opportunity to develop skills such as

skimming, scanning and recognizing main ideas and topic sentences, they are beneficial in improving reading skills. Moreover, by offering communicative tasks with listening options and pictures and animations they may be effective in enhancing students' motivation towards reading.

Although more than half of the students and majority of the teachers believe that CALL programs are beneficial in developing reading skills, they believe that CALL programs may not be so beneficial in developing writing skills. Only 41% of the students and 36% of the teachers believe that the CALL program is beneficial in developing writing skills. It is tempting to speculate that these findings may be related to teachers' belief in teaching writing by traditional methods and their lack of training in how to teach writing with computers and lack of writing software programs. The interview findings also indicated that teachers could not find enough suitable writing exercises, and they thought that students could not practice the actual writing process.

This seems to contradict with the findings in the literature. Many researchers have found that, software programs might be beneficial in improving students' writing skills since they offer word programs in which students can check their grammar mistakes, spelling, punctuation and sentence structure. It has also been suggested that they can also better organize their assignments and save time (Costanzo, 1989; Dunkel, 1991; Howie, 1989; Neu & Scarcella, 1991).

The results of the findings also indicate that 47% of the students but 69% of the teachers believe that the CALL program at the Preparatory School of CBU might improve speaking skills. The possible reasons for the difference between students' and teachers' perceptions that the CALL program improves speaking skills may arise from lack of speaking software programs for intermediate and advanced levels.

However, the teachers may be responding to this question by considering the speaking software programs in general regardless of the level of students. In addition, students may find the speaking software programs uninteresting.

On the other hand, the results of the findings show that the majority of the students and teachers believe that the CALL program is beneficial for improving and practicing grammar and vocabulary knowledge. However, interview findings indicate that teachers believe grammar lessons should be taught in class rather than in a computer laboratory. Overall, the mean scores of students and teachers for this section indicate that students and teachers demonstrate positive attitudes towards the content of the CALL program. The findings of this section provided useful insights into the first, second and third research questions of the study.

Students' and Teachers' Perceptions of the Application of the CALL Program at the Preparatory School of CBU

Section IV of the questionnaires was designed to investigate students' and teachers' perceptions of the application of the CALL program. Since the questions were not the same in both questionnaires, a comparison between the perceptions of students and teachers cannot be made. The results of the Pearson Chi-square Test indicated that there were statistically significant differences among the responses of students. One-way ANOVA, Tukey Test indicated that these differences were among levels. The results showed that the differences were between advanced levels and beginners and between intermediate levels beginners and intermediate levels and elementary levels. For instance, while 73% of the advanced level students thought that their teacher gave them effective guidance in a computer laboratory, 71% of the beginners found the guidance of their teacher to be ineffective. A possible reason for this may be the advanced level of students' high language abilities. Thus, they may

need less guidance while studying in a computer laboratory while beginners may expect more guidance and individual attention from their teachers.

The results also indicated that 76% of the students reported that while studying on their own in computer session, they felt themselves more comfortable than studying in class. This may also be supported by findings in the literature. Kenning & Kenning (1983) state that while studying with computers students feel more comfortable since computers offer privacy and lower the anxiety level of students. They note that students may have a fear of being mocked and avoid making mistakes in classroom activities.

The results of the findings gathered from teachers' responses indicate that 77% of the teachers believe that CALL programs can be used to teach grammar and 87% state that these programs are beneficial in practicing grammar points. This difference is reflected in the interviews. A number of teachers thought that grammar can only be taught in class but can be practiced in computer sessions.

The results of the findings for section II indicate that the great majority of the teachers have positive attitudes towards using computers in language instruction and like using computers for teaching purposes. Moreover, the results of the findings gathered from this section imply that more than half of the teachers (64%) like teaching with computers. According to the data gathered from the interviews the result of this finding may be explained by teachers' lack of training and a common curriculum for using CALL programs at the Preparatory School of CBU. In addition only 37% of the teachers believe that students may learn more from computers than from books. This may be related to teachers' perceptions of the effectiveness of traditional methods, lack of training and of technical support. Referring to the literature, teachers' unwillingness to change their classical methods may be

explained as their prejudicial beliefs about technology use since they may not have the necessary training to teach with computers. In addition, external factors, such as the absence of technical support and teachers' low computer competency may make them feel less comfortable while using computers in language instruction (Bebell, O' Conner, O' Dwyer, & Russell, 2003; Dupagne & Krendl, 1992; Dusick, 1998; Ertmer, Addison, Lane, Ross, & Woods, 1999).

The results of the findings also indicate that only 18% of the teachers reported that they could monitor the progress of their students in computer sessions better than in class. Again, this may be explained by teachers' lack of training and difficulty in managing lessons in a computer laboratory. The responses given to Qc in section V of the questionnaire also indicate that 55% of the teachers have difficulty in planning lessons for computer sessions.

Finally, the overall mean score for this section gathered from students' questionnaire was calculated as 2.66, and the overall mean score of teachers' perceptions was calculated as 3.00. Since the mid-point of the scale is 2.5, overall mean scores of students' and teachers' perceptions may be seen as mildly positive towards the application of CALL program at the Preparatory School of CBU. The findings of this section which were provided from both students' and teachers' questionnaires directly referred to the first and second research questions of the study.

Factors Affecting Students' and Teachers' Attitudes towards the Use of CALL in Language Instruction

Section V of the both questionnaires was designed to investigate the factors that affect students' and teachers' attitudes towards the use of CALL in language instruction. The results of the findings show that 60% of the students believe that the

lack of training in using software programs for learning a language affected their learning with computers. In addition, 55 % of the students reported that unsatisfactory instructions of their teachers in computers sessions affected their learning with computers. This may be explained as being due to beginners' and elementary students' high expectations of their teachers.

The qualitative data gathered from 'other factors' indicate that the majority of advanced level students found the reading passages uninteresting and the exercises easy to do. They reported that they wanted to read and search topics related to their departments. Moreover, the data collected from beginners' responses indicate that they found computer sessions a waste of time. They did not benefit from computer programs due to a lack of individual guidance and their own language competence.

The results of the findings gathered from teachers' responses to this section indicate that 64% teachers reported that training is required in order to teach with computers. However, interview findings reveal that training alone may not be sufficient; it is perhaps only the first step in preparing a curriculum to teach with computers. Since the four interviewees stressed the importance of having a common curriculum or a syllabus, preparing a curriculum to enhance the effectiveness of teaching with computers may be a solution for the teachers.

Sixty-four percent of the teachers also reported that the attitudes of their students affect their teaching with computers. This is consistent with Ertmer et. al. (1999), who suggested that external factors may facilitate or limit teachers' perceptions in using this technology. Thus, students' lack of motivation in computer sessions may have an effect on teachers' motivation while teaching with computers.

In addition a great majority of teachers thought the time that they spent in computer sessions was insufficient to cover all the topics on the curriculum. This

suggests that time constraints may also be a significant factor influencing the effectiveness of the computer sessions.

The qualitative data also indicate that the teachers were affected by the number of students in a computer laboratory. Since it might be difficult to deal with each student, the teachers might have problems in managing the students in a computer laboratory. Other findings show that teachers were also affected by technical problems that they faced in computer sessions. They stressed the importance of technical support while teaching with computers. The interviews also support this finding.

Pedagogical Implications

The results of this study suggest that integrating computer technology in language instruction and providing the necessary devices and environment are not enough to begin teaching with computers. The research findings (Clark, 2000; Herman, 2002) suggest that there is a need for training for both students and teachers. Also, technical support should be increased for effective use of computer technology in language instruction. The results also suggest the need for a common curriculum.

The findings of the study may also suggest that students should be made aware of the benefits of the computers in language instruction as their teachers. During the integration of this technology, students and teachers need to be provided with the necessary information about the benefits of computer programs in language instruction. This requires guidance and assistance from experts and trainers. These factors have also been stressed by Kassen & Higgins (1997).

In order to check whether there are differences among the attitudes or perceptions of students and teachers brief questionnaires may be distributed to the

students and teachers by the administrators. With the help of on-going evaluations, which can be made through brief questionnaires or individual or group interviews, the administrators and the teachers may determine whether the curriculum requires any changes or improvements. The findings in the literature also report the importance of on-going evaluations in learning and teaching process (Brown, 1995; Graves, 2000).

Limitations of the Study

There are a number of limitations to the present study. The number of teachers working at the Preparatory School of CBU is the first limitation of the study. All twenty-two permanent teachers participated in the study while the study may be an accurate reflection of the Preparatory School of CBU, it would not be appropriate to generalize the attitudes of teachers at the Preparatory School of CBU to all English teachers who are working in schools that use CALL programs in language instruction. Moreover, there are only three male teachers, so while analyzing the data, the researcher could not determine whether there was a difference among the responses of the teachers in terms of gender.

Another limitation of the study is that the researcher could not carry out computer session observations due to time constraints. Observations of computer sessions would be helpful to better understand the problems of students and teachers in computer sessions and whether the participants use computers effectively for learning and teaching the language.

Suggestions for Further Research

This study examined the attitudes of students and teachers towards the use of CALL in language instruction. The study specifically explored students' and teachers' perceptions of computers in daily tasks and in language instruction, the

content and the application of the CALL program used at the Preparatory School of CBU, the factors affecting their use of CALL programs and similarities and differences between their perceptions. Since the computer session observations could not be carried out due to time limits, further research involving computer session observations may be carried out in order to better understand in which areas students and teachers face problems and how the CALL programs are applied.

Moreover, since there is no curriculum for teaching with computers, a needs analysis may be conducted involving all the stakeholders of the institution to create an effective curriculum. After determining the needs for an effective curriculum, workshops or training sessions may be given to the students and teachers. As a further study the impact of training on students and teachers may be analyzed as an experimental study.

Finally, in order to generalize the attitudes of teachers, further analysis could be conducted with the teachers working in other schools where CALL programs have been integrated into their curriculum.

Conclusion

The findings of the study indicated that students and teachers demonstrated positive attitudes towards the use of computers in daily tasks and in language instruction. However, the findings showed that there were statistically significant differences among the perceptions of students in terms of their levels. The findings also indicated that students and teachers believed that training was required and they believed that they needed training to learn and teach with computers.

After determining the needs of students and teachers, training sessions could be provided in order to use the technology we have at the Preparatory School of CBU more effectively. Through the training sessions, students and teachers could be made

more aware of the benefits of computer programs in learning and teaching a language. Thus, they may be more willing to change their way of learning and teaching.

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APPENDICES

APPENDIX A

Consent Form

Dear colleagues and students,

I am currently enrolled on the MA TEFL Program at Bilkent University. The aim of my research study is to investigate the attitudes of students and teachers towards the use of computers in language instruction at the Preparatory School of Celal Bayar University. I am also investigating the similarities and differences between the perceptions of students and teachers towards the use of CALL programs in language instruction.

Questionnaires for students and teachers are the first phase of my study. Interviews with teachers who are currently teaching at computer laboratories will be the second phase of the study. Be sure that all the personal data provided from both questionnaires and interviews will be kept strictly confidential in my reports.

Thank you in advance for your help and cooperation.

Seden Önsoy

MA TEFL

Bilkent University, Ankara

seden@bilkent.edu.tr

Consent Form

I have read the above information. I hereby give my consent for the data acquired to be used by Seden Önsoy in this survey.

Name:

Date:

Signature:

APPENDIX B
Teachers' Questionnaire

SECTION ONE: Background Information

Please *tick* (\checkmark) the appropriate choices and provide the necessary information below.

1. Age: 20-25 26-30 31-35 36-40 41-45+
2. Sex: Female Male
3. Years of teaching experience:
 Less than 1 year 1-4 5-8 9-12 13+
4. Currently teaching at level:
 A B C D
5. Are you currently teaching in a computer laboratory? Yes No

SECTION TWO: General Attitudes

This section is designed to elicit your general attitudes towards computers and towards using computer technology in language instruction.

1. How often do you use computers? Please *tick* (\checkmark) the appropriate option.
 less than once a week 1-2 times a week
 3-4 times a week 5 or more times a week
2. What do you use computers for? Please tick (\checkmark) the appropriate option(s), and also indicate your frequency of use (e.g., \checkmark __ electronic mail [1 2 3]).
1= rarely 2= sometimes 3= often
___ electronic mail [1 2 3]
___ games [1 2 3]
___ online shopping [1 2 3]
___ materials design [1 2 3]
___ typing and maintaining lesson plans, office work: student records, administrative reports (e.g., word, excel, power point) [1 2 3]
___ surfing internet [1 2 3]
___ assigning and checking assignments via e-mail [1 2 3]
___ chat rooms [1 2 3]
___ entertainment [1 2 3]
___ web page design [1 2 3]

___ other (please specify).

3. For the following items, please **circle** the answers that best show your opinion.

1= strongly disagree

2= disagree

3= agree

4= strongly agree

a. I like using computers.	1	2	3	4
b. I generally have positive attitudes towards computers.	1	2	3	4
c. Using computers makes me more efficient in my life.	1	2	3	4
d. Using computers make me more efficient at work.	1	2	3	4
e. Using computers generally makes completing tasks easier.	1	2	3	4
f. I like searching the internet for general interest.	1	2	3	4
g. I perceive computers as pedagogical tools.	1	2	3	4
h. I generally have positive attitudes towards using computers in language instruction.	1	2	3	4
i. I like using computers for teaching purposes.	1	2	3	4
j. I like searching the internet for teaching resources.	1	2	3	4
k. Computers can be a good supplement to support teaching.	1	2	3	4
l. Computers can be a good supplement to support learning.	1	2	3	4
m. I believe that training is required to teach with computers.	1	2	3	4
n. I think that I need training to teach with computers.	1	2	3	4

SECTION THREE: Opinions about the Content of the CALL Program at the Preparatory School of CBU.

This section is designed to elicit your opinions about the content of the CALL program at the Preparatory School of CBU. For the following items, please **circle** the answers that best show your opinion.

1= strongly disagree

2= disagree

3= agree

4= strongly agree

1. The CALL program is beneficial in improving reading skills.	1	2	3	4
2. The CALL program is beneficial in improving writing skills.	1	2	3	4

3. The CALL program is beneficial in improving speaking skills.	1 2 3 4
4. The CALL program is beneficial in improving listening skills.	1 2 3 4
5. The CALL program is beneficial in improving grammar.	1 2 3 4
6. The CALL program is beneficial in improving vocabulary knowledge.	1 2 3 4
7. Reading passages on the computer program are easy to understand	1 2 3 4
8. The CALL program offers students choices while studying.	1 2 3 4

SECTION FOUR: Opinions about the Application of the CALL Program at Preparatory School of CBU.

This section is designed to elicit your opinions about the application of the CALL program at the Preparatory School of CBU. For the following items, please *circle* the answers that best show your opinion.

1= strongly disagree

2= disagree

3= agree

4= strongly agree

1. The CALL programs can be used to teach grammar to support students' learning.	1 2 3 4
2. The CALL programs can be used to teach vocabulary to support students' learning.	1 2 3 4
3. The CALL programs can be used by students in practicing grammar to support their learning.	1 2 3 4
4. The CALL programs can be used by students in practicing vocabulary to support their learning.	1 2 3 4
5. Student interest in learning language will increase by using computer programs.	1 2 3 4
6. I like teaching with computers.	1 2 3 4
7. I can monitor my students' progress in a computer laboratory better than in class.	1 2 3 4
8. I believe students can learn more from computers than from books.	1 2 3 4

SECTION FIVE: Factors Affecting Teachers' Use of the CALL Program.

Please *tick* (✓) the appropriate options that you think affect your way of teaching with computers (You may tick more than one).

I believe I need training in guiding students in the use of software for learning language.

I believe I need training in guiding students in the use of software for practicing language.

I believe I need training in planning lessons in a computer laboratory.

I believe the curriculum that we use for CALL instruction is satisfactory.

The time that we spend in a computer laboratory is not enough to cover all the topics on the curriculum.

The design of the laboratory positively affects my teaching with computers.

Students attitudes towards CALL instruction affect my teaching in a computer laboratory.

Other factors (please specify)

APPENDIX C

Students' Questionnaire

SECTION ONE: Background Information

(BÖLÜM I: Genel Bilgiler)

Please **tick** (✓) the appropriate choices and provide the necessary information below. (Aşağıda yer alan genel bilgiler için uygun seçenekleri işaretleyiniz).

1. Sex (cinsiyet): Female (Kadın) Male (Erkek)
2. Currently studying at level (Öğrenim gördüğü kur):
 A B C D

SECTION TWO: General Attitudes

(BÖLÜM II: Genel Tutumlar)

This section is designed to elicit your general attitudes towards computers and towards using computer technology in language instruction (Bu bölüm sizin yabancı dil öğretiminde bilgisayarların kullanılmasına karşı olan tutumlarınızı değerlendirmek için oluşturulmuştur.).

1. How often do you use computers in your daily tasks? (Bilgisayarı günlük hayatınızda ne kadar sıklıkla kullanıyorsunuz?) Please **tick** (✓) the appropriate option (Lütfen uygun seçeneği işaretleyiniz).

- | | |
|---|--|
| <input type="checkbox"/> once a week
(haftada 1 defa). | <input type="checkbox"/> 1-2 times a week
(haftada 1-2 defa) |
| <input type="checkbox"/> 3-4 times a week
(haftada 3-4 defa) | <input type="checkbox"/> 5 or more times a week
(haftada 5 defa ya da daha fazla) |

2. What do you use computers for? Please **tick** (✓) the appropriate option(s), and also indicate your frequency of use (e.g., electronic mail [1 2 3]).

(Bilgisayarı hangi amaçlar için kullanıyorsunuz? Lütfen uygun seçenekleri işaretleyiniz ve kullanım sıklığını belirtiniz.) (Örneğin: elektronik posta [1 2 3]).

- | | |
|--|-----------|
| 1= rarely (nadiren) 2= sometimes (bazen) 3= often (sıklıkla) | |
| <input type="checkbox"/> electronic mail (elektronik posta) | [1 2 3] |
| <input type="checkbox"/> games (oyunlar) | [1 2 3] |
| <input type="checkbox"/> online shopping (internet üstünden alışveriş) | [1 2 3] |

- ___ doing assignments (ödev yapmak için) [1 2 3]
- ___ surfing internet (Internet gezinimi) [1 2 3]
- ___ chat rooms (sohbet odaları) [1 2 3]
- ___ entertainment (eğlence) [1 2 3]
- ___ web page design (web sayfası tasarımı) [1 2 3]
- ___ other (please specify) (diğer) (lütfen belirtiniz)
-

3. For the following items, please **circle** the answers that best show your opinion
(Alttaki seçenekler için, lütfen düşüncenizi en iyi anlatan ifadeyi daire içine alınız).

- 1= strongly disagree (kesinlikle katılmıyorum) 2= disagree (katılmıyorum)
- 3= agree (katılıyorum) 4= strongly agree (tamamen katılıyorum)

a. I like using computers. a. Bilgisayar kullanmayı seviyorum.	1 2 3 4
b. I generally have positive attitudes towards computers. b. Bilgisayar kullanımına karşı olumlu tutumlar içerisindeyim.	1 2 3 4
c. Using computers makes me more efficient in my life. c. Bilgisayar kullanımı beni hayatta daha etkin kılıyor.	1 2 3 4
d. Using computers make me more efficient in the classroom. d. Bilgisayar kullanımı beni sınıfta daha etkin kılıyor.	1 2 3 4
e. Using computers generally makes completing tasks easier. e. Bilgisayar kullanımı genellikle işlerimi bitirmemi kolaylaştırıyor.	1 2 3 4
f. I like searching the internet for general interest. f. Genel ilgi alanlarım için internette araştırma yapmayı seviyorum.	1 2 3 4
g. I perceive computers as learning tools. g. Bilgisayarları öğrenim araçları olarak görüyorum.	1 2 3 4
h. I generally have positive attitudes towards using computers in language instruction. h. Bilgisayarla yabancı dil öğrenimine karşı olumlu tavırlar içerisindeyim.	1 2 3 4
i. I like using computers for learning purposes. i. Bilgisayarı öğrenim amaçlı kullanmayı seviyorum.	1 2 3 4
j. I like searching the internet for study resources.	1 2 3 4

j. Kaynak arařtırmak iin internette arařtırma yapmayı seviyorum.	
k. Computers are good instruments to support learning. k. Bilgisayarlar ğrenimi desteklemek iin iyi bir aratır.	1 2 3 4
l. I believe that training is required to use computers in learning a language. l. Bilgisayarla dil ğrenimi iin eđitimin gerekli olduđuna inanıyorum.	1 2 3 4
m. I think that I do not need training to use computers effectively. m. Bilgisayarı etkin bir biimde kullanmak iin eđitime ihtiyacım yok.	1 2 3 4

SECTION THREE: Opinions about the Content of the CALL Program at Preparatory School of CBU.

BÖLÜM III: CBÜ İngilizce Hazırlık Birimindeki Bilgisayar Programının İeriđi ile İlgili Düşünceler.

This section is designed to elicit your opinions about the content of the CALL program at Preparatory School of CBU. For the following items, please *circle* the answers that best show your opinion (Bu bölüm sizin CBÜ İngilizce Hazırlık Birimindeki bilgisayar programının ieriđi ile ilgili düşünceleriniz hakkında bilgi edinmek iin oluşturulmuřtur. Alttaki seenekler iin, lütfen düşüncenizi en iyi anlatan ifadeyi daire iine alınız).

1= strongly disagree (Kesinlikle katılmıyorum) 2= disagree (katılmıyorum)
3= agree (katılıyorum) 4= strongly agree (tamamen katılıyorum)

1. The CALL program is beneficial in improving reading skills. 1. Kullanılan bilgisayar programı okuma yeteneklerini geliřtirmek iin yararlıdır.	1 2 3 4
2. The CALL program is beneficial in improving writing skills. 2. Kullanılan bilgisayar programı yazma yeteneklerini geliřtirmek iin yararlıdır.	1 2 3 4
3. The CALL program is beneficial in improving speaking skills. 3. Kullanılan bilgisayar programı konuşma yeteneđini geliřtirmek iin yararlıdır.	1 2 3 4
4. The CALL program is beneficial in improving listening skills. 4. Kullanılan bilgisayar programı dinleme yeteneđini geliřtirmek iin yararlıdır.	1 2 3 4

5. The CALL program is beneficial in improving grammar. 5. Kullanılan bilgisayar programı dilbilgisini geliřtirmek için yararlıdır.	1 2 3 4
6. The CALL program is beneficial in improving vocabulary knowledge. 6. Kullanılan bilgisayar programı kelime bilgisini geliřtirmek için yararlıdır.	1 2 3 4
7. Reading passages on the computer program are easy to understand 7. Kullanılan bilgisayar programındaki okuma parçaları kolay anlaşıla bilmektedir.	1 2 3 4
8. The CALL program offers students choices while studying. 8. Kullanılan bilgisayar programı öğrencilere çalışırken farklı seçenekler sunmaktadır.	1 2 3 4

SECTION FOUR: Opinions about the Application of the CALL Program at Preparatory School of CBU.

BÖLÜM IV: İngilizce Hazırlık Birimindeki Bilgisayar Programının Uygulanışı ile İlgili Düşünceler.

This section is designed to elicit your opinions about the application of the CALL program in a computer laboratory at Preparatory School of CBU. For the following items, please *circle* the answers that best show your opinion (Bu bölüm sizin CBÜ İngilizce Hazırlık Birimindeki bilgisayar programının uygulanışı ile ilgili düşünceleriniz hakkında bilgi edinmek için oluşturulmuştur. Alttaki seçenekler için, lütfen düşüncenizi en iyi anlatan ifadeyi daire içine alınız).

1= strongly disagree (kesinlikle katılmıyorum) 2= disagree (katılmıyorum)
3= agree (katılıyorum) 4= strongly agree (tamamen katılıyorum)

1. I can use my time effectively in accomplishing the tasks on the computer. 1. Bilgisayarda verilen görevleri uygularken zamanımı etkin bir şekilde kullanabiliyorum.	1 2 3 4
2. My teacher gives me effective guidance in the computer laboratory. 2. Bilgisayar laboratuvarında öğretmenim bana etkin bir biçimde yardımcı olur.	1 2 3 4

3. My teacher manages lessons in the computer laboratory effectively. 3. Öğretmenim bilgisayar laboratuvarında dersleri etkin bir şekilde yürütüyor.	1 2 3 4
4. My teacher deals effectively with each individual student in laboratory sessions. 4. Bilgisayar derslerinde öğretmenim her öğrenci ile etkin bir şekilde ilgileniyor.	1 2 3 4
5. In computer sessions I can understand the reasons for mistakes better than I do in class. 5. Bilgisayar derslerinde hatalarım nedenlerini sınıfa ararla daha iyi anlıya biliyorum.	1 2 3 4
6. While studying on my own in laboratory sessions, I feel more comfortable than studying in class. 6. Bilgisayar laboratuvarında kendi başıma çalışırken, kendimi sınıfta olduğumdan daha rahat hissediyorum.	1 2 3 4

SECTION FIVE: Factors Affecting Students' Use of the CALL Program.

BÖLÜM V: Öğrencilerin Bilgisayar Programı Kullanımını Etkileyen Faktörler.

1) Please *tick* (✓) the appropriate options that you think affect the way of your learning with computers (You may tick more than one). (Lütfen bilgisayar kullanımı ile ilgili sizi etkileyen faktörlerden uygun seçenekleri işaretleyiniz. Birden fazla seçenek işaretleye bilirsiniz.)

[] I believe I need training in using software programs in learning language.

(Dil öğreniminde, yazılım programlarını kullanabilmek için eğitime ihtiyacım var.)

[] I believe I need training in using software programs for practicing language.

(Dil üzerinde alıştırmaları yaparken, yazılım programlarını kullanabilmek için eğitime ihtiyacım var.)

[] I think our teachers' instructions in laboratory sessions are satisfactory.

(Bilgisayar derslerinde öğretmenimizin açıklamalarını başarılı buluyorum.)

[] The time that we spend in a computer laboratory is not enough to cover all the topics on the curriculum.

(Bilgisayar lâboratuvarında geçirdiđimiz zaman müfredattaki tüm konuları kapsamak için yeterli deđil.)

[] The design of the laboratory positively affects my learning with computers.

(Bilgisayar lâboratuvarının düzeni bilgisayarla öğrenimimi olumlu yönde etkiliyor.)

[] My teachers attitudes towards CALL instruction positively affect my learning in a computer laboratory.

(Öğretmenimin bilgisayarla dil öğrenimine karşı gösterdiği tutumlar, bilgisayar lâboratuvarındaki öğrenimimi olumlu olarak etkiliyor.)

[] Other factors (please specify) (Diđer faktörler, lütfen belirtiniz.)

APPENDIX D
INTERVIEW QUESTIONS

Attitudes:

1. What do you think of using Computer Assisted Language Learning (CALL) programs in language instruction?
2. Can you define your attitudes towards the use of CALL?
3. Do you think that you need training for using this technology? If so can you explain in which areas you need training?
4. What do you think about the students' attitudes towards the use of CALL?

Content of the Program:

5. In your opinion, which language skills or knowledge can be improved through computers? Can you give reasons?

Application of the Program

6. Can you describe one of your laboratory sessions with your students?
7. Do you have any difficulty in managing the students in a computer laboratory? If so, what are these?
8. Do you follow any kind of curriculum for teaching with computers?
9. In your opinion, what can be done in order to lead an effective lesson with computers?
10. What are the advantages and disadvantages of using CALL programs in language instruction?

Closure

Is there anything you would like to add about the topics we have covered here?

Thank you very much indeed for your participation and contribution.

APPENDIX E

Sample Transcript of Interview

INTERVIEW

Interviewer: This is an interview about the computer assisted language learning or CALL. I want to ask a couple of questions. What do you think of using computer-assisted language learning programs (CALL) for language instruction?

Interviewee: First of all I find them useful both for teachers and students because first of all I like being busy with computers and it is very fruitful and all students like being busy with computers. There are lots of colorful examples, more examples, colorful examples maybe some vocabulary studies on computers so students enjoy studying with computers.

Interviewer: Can you define your attitudes towards the use of call?

Interviewee: How shall I put it? I think computers should be used in teaching foreign language because they provide listening exercises, writing exercises, speaking exercises, most of the time we cannot do all of them at the same time. Computers provide this opportunity to us.

Interviewer: Do you think that you need training for using this technology? If so can you explain in which areas you need training?

Interviewee: I think I need training. Although we all know how to use computers it is not the same using computers as teaching a different language by computers for example we studied some teaching exercises at university. But we don't know how to teach a foreign language by using computers. So they should or someone, some colleagues will teach or we should be trained how to teach a

language or how to teach for example specifically writing, speaking by using and which exercises should be preferred etc.

Interviewer: What do you think about the students' attitudes towards the use of CALL?

Interviewee: As I said before they like it but they sometimes they took it as a game so we have some problems we can face with some problems for example we cannot control all the time all students in a class. They can do some different exercises. If you let them or teach them how to study by themselves, they can be very successful and would be very practical. But if you want to do exercises at the same time, all together, there appear a lot of problems.

Interviewer: In your opinion which language skills or knowledge can be improved through computers? Can you give reasons?

Interviewee: At the first place I think about considering our program I think vocabulary and listening, then comes speaking and grammar and at the last time writing because I cannot find writing exercises very.... how can I say? Very efficient and not enough exercises. They are just filling the gaps. They don't write full sentences all the time. They just listen ok listen and put in the unknown words but they don't practice the actual writing.

Interviewer: Can you describe one of your laboratory sessions with your students?

Interviewee: We use two lab classes one after another. I explain my students what to do and how they do it and I tell them they should do. I tell them they are responsible for their own learning. And in the second lesson if they are finished with their studies I let them play word games or study carefully the things they don't know. For example, they look up the words the grammar teachers or other teachers

have given to their students. Most of them prefer playing games but I find them very educating because they learn new words and some of the games teach the words by synonyms, antonyms and etc.

Interviewer: As teachers in Celal Bayar University do you use a common curriculum for teaching with computers?

Interviewee: We have a special program and we use and follow it, not written but we have a oral curricula. Because we didn't want to fix it to a, we don't want to define borders around teaching computer, teaching English by computers so we want to have it free and let the students learn freely we wanted to guide them not strictly to teach something.

Interviewer: Do you have difficulty in managing the students in a computer laboratory? If so, what are these?

Interviewee: Would you please explain it a little bit?

Interviewer: What are the problems you face in a computer lab?

Interviewee: First of all the damage that they give to the computers of course. Apart from that as I said before if they decide to do something different and they may also enter some restricted programs they shouldn't enter and we may also have some mechanical problems like some of the files cannot be read and usually we overcome and solve the problems most of he time.

Interviewer: In your opinion, what can be done in order to lead an effective lesson with computers?

Interviewee: First of all, all the teachers and students should be trained and we should be given some sample lessons the students and teachers should understand what they should and shouldn't do in that computer laboratory and how to operate the computer and how to understand the things.

Interviewer: Do you have any training for that?

Interviewee: I think I have little training for example last year they just show us the program, how to use it but it was not efficient enough. Although we have done some practices together I do not find it enough to learn and teach by using computers.

Interviewer: Actually we have talked about the advantages so what are the disadvantages of CALL?

Interviewee: Computers may be attractive machines but I think since they don't have any mimics [gestures] and other sensation they don't have the quality that the teachers have and it doesn't have so permanent knowledge it doesn't give that permanent knowledge. But the teachers have mimics [gestures] or they should know that what the students may have in their mind but in the computers by studying with computers they just go into the program and they study and after turning it off, they mainly forget they just remember when they turn it on again.

Interviewer: Is there anything you would like to add?

Interviewee: I prefer there would be more examples or exercises but efficient ones not just fill in the gaps. More exercises would be much more better.

Interviewer: Thank you very much for your contribution and cooperation.