

LEARNER ATTITUDE TOWARD CALL AND LEVEL OF ACHIEVEMENT IN BASIC LANGUAGE SKILLS

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Abstract

It is a fact that the use of computers has been a revolution in the history of human life in all aspects, and language learning could not be exempted from this. Thus, many institutions around the world have integrated computer-assisted language learning (CALL) into their curricula, and have been trying to constantly utilize and evaluate the contribution of such an attempt to their teaching. This paper aims to present the results of research conducted for these two aspects of CALL, and investigates the relationship between students' attitude toward CALL and their achievement in the language skills of Listening, Speaking, Reading and Writing. A five-point Likert scale attitude questionnaire and achievement tests for separate language skills were used to collect data from the students who participated in this research. The findings of the study revealed that students who participated in this study had a positive attitude toward CALL in general and also using CALL for these four language skills. Even though no significant difference was obtained among specific language skills, CALL seems to be favored more for Listening and Writing skills. Also, the results of the study did not yield any significant relationship between student attitude toward CALL for language skills and their achievement.

Key Words: CALL, attitude, achievement, basic language skills

BİLGİSAYAR DESTEKLİ DİL ÖĞRENİMİNE (CALL) ÖĞRENCİ YAKLAŞIMI VE TEMEL DİL BECERİLERİ DERSLERİNDEKİ BAŞARI SEVİYELERİ

Öz

Bilgisayarın insan yaşamının bütün alanlarında kullanılmasının bir devrim olduğu gerçektir ve dil öğrenimi de bunun dışında kalamazdı. Dünyanın birçok yerinde dil öğrenen kurumlar bilgisayar destekli dil öğretimini müfredatlarına eklediler ve sürekli olarak bu yöntemden daha iyi yararlanmanın yollarını aramakta ve katkılarını değerlendirmektedirler. Bu makale CALL'un bu iki yönü üzerinde yapılmış olan bir araştırmanın sonuçlarını sunmayı amaçlamakta olup, öğrencilerin dil öğretiminde bilgisayar kullanımına olan

yaklaşımları ile bu yöntemle almış oldukları dinleme, konuşma, okuma ve yazma temel beceri derslerinde göstermiş oldukları başarı arasında bir ilişki olup olmadığını araştırmaktadır. Yaklaşım sorunları ve her bir beceri dersi için başarı testleri kullanılarak veri toplanmıştır. Bu çalışmaya katılan öğrencilerin CALL'a genel yaklaşımları ve dört temel beceri derslerinde kullanımına yönelik yaklaşımlarının olumlu olduğu görülmüştür. Temel dil becerilerinde CALL'un kullanımına yönelik kayda değer bir yaklaşım farkı olmamasına rağmen, daha çok dinleme ve yazma becerileri için tercih edildiği görülmüştür. Ayrıca, genel öğrenci yaklaşımı ve dil becerilerine özgü öğrenci yaklaşımları ile başarı seviyeleri arasında herhangi bir ilişki olmadığı sonucuna varılmıştır.

Anahtar Kelimeler: Bilgisayar Destekli Dil Öğrenimi (CALL), yaklaşım, başarı seviyesi, temel dil becerileri

1. INTRODUCTION

Many procedures have been adopted to integrate computer-assisted language learning (CALL) into curriculum for teaching and learning language skills. Lasagabaster and Sierra (2003) point out that the number of students using CALL is always increasing and researchers and teachers make unraveling efforts to integrate CALL into the curriculum. Thus, all around the world CALL classes have been designed, implemented and investigated for their effectiveness compared to the traditional methods and techniques of language teaching. This study can be considered as part of this recent trend in the field of language teaching, and focuses on exploring learners' attitude toward CALL as a recent exposure for them in their language learning experience and its relationship to their performance in the specific language skills of Listening, Speaking, Reading and Writing.

Because of its reported positive effect on learning language skills, the use of technology as a medium has increased phenomenally in the last two decades (Greenfield, 2003). Computer-mediated language learning helps students develop their both productive and receptive skills. Furstenberg (1997) contends that CALL is a tool which enhances learner-learner interaction. In the same line, Warschauer (1997) believes that CALL helps learners use language in authentic situations. The instructor, therefore, should involve learners in well-prepared computer-based activities, and use well-established methods and techniques. Kelm (1998) also points out that CALL helps learners use language in authentic situations, promotes communication among learners, provides them with feedback about their errors, and allows socialization and communication between them.

CALL has been reported to have a positive effect on learners' performance and attitude. Ayres (2002) states that CALL is relevant to students' needs as it provides them with useful information. According to his findings, CALL should be used more frequently in different language courses. This can be attributed to the fact that CALL environment is a stress-free atmosphere and more relaxed than the classroom (Murphy, 1997; Roed, 2003). Furthermore, more interaction between learners occurs in computer-based learning because students depend on themselves.

The class becomes more student-centered than teacher-centered in a CALL environment and so chances for cooperation increase because students spend a lot of time working together (Hawisher and Selfe, 1991; Brandl, 2002).

According to some research findings, students have positive attitude toward using computers for learning EFL skills. For example, Greenfield (2003) reports that the majority of Hong Kong 10th and 11th graders say that computer-based learning is enjoyable because they gain confidence in learning language via computer. They feel that the computer helps them improve the productive skills, i.e., Writing and Speaking through developing their way of thinking and motivating them for more interaction and cooperation.

Students' positive attitude toward CALL motivates them to approve of learning and teaching strategies exploited via CALL and thus achieve more in the exams. Smith (2000) examined the phenomenon of students' positive or negative response to using CALL as a language learning approach. He concluded that there is a relationship between students' attitude toward type of teaching/learning and their attitude toward certain CALL activities. In other words, students' good attitude toward CALL helped them benefit more from technology in learning language skills.

It has been commonly reported that motivation has a positive effect on students' performance in learning language skills. Aacken (1999) contends that there is also a positive interaction between positive student attitude toward CALL and instrumental motivation which lead to mastering language effectively. Warschauer (1996) also points out that CALL enhances students' motivation to learn language skills such as Writing and improve communication and interaction.

As one of the language skills, Writing was focused on by Cunningham (2000) who investigated the opinions of students toward using computers in a writing course. He indicated that students found the computer-based class more challenging but non-threatening. He believes that word processor is useful for the development of students' performance in Writing and helps them concentrate their attention on certain aspects of their writing like grammar, vocabulary, and organization. Students also think that computer is helpful, as it enables them to pay attention to the mechanics of their writing. He adds that students' positive attitude toward writing on the computer contributes to improving their writing abilities by increasing their motivation to write and revise, and sharing their ideas with classmates. Gousseva (1998) also believes that students' attitude to electronic interaction in writing classes are generally positive because it allows them to see different viewpoints, gives them a chance to read and learn more.

One of the studies concerned with students' attitude toward CALL is that of Lasagabaster and Sierra (2003). They investigated the opinions of 59 university students through a 18-item questionnaire about the effectiveness of CALL programs. The conclusion that Lasagabaster and Sierra draw from the study is that

the students consider CALL programs as complementary tools in language learning and that CALL creates a less stressful environment for students as they can study on their own in a more flexible schedule.

On the other hand, there is a certain degree of resistance against the integration of CALL into EFL curricula. Some people may have negative attitude toward CALL because they think that it is a kind of unwanted “luxurious” change. Lee (2000) assumes that there is a natural tendency for some people to resist change. As engaging in CALL is a continuing challenge that requires more time and commitment, some people may not accept it. Furthermore, misconception of the use of CALL may limit development and threaten the use of technology for language teaching. Many people also pose the question about the effectiveness of using technology for teaching and learning. Gillespie and Mckee (1999) state that many teachers and institutions are worried about the integration of CALL into ESL/EFL curricula. In order to judge the success of CALL, Gillespie and Mckee call for the investigation of students’ attitude toward the effectiveness of the use of CALL approach, techniques, methods, and programs.

Salaberry (2001) analyzed the articles included in *Modern Language Journal* about the use of technology including CALL for second language learning and teaching. He believes that technology-enhanced learning is revolutionary from the pedagogical point of view. However, the results that Salaberry report about the use of CALL show that the effect of technology on second language learning and teaching is not clear. He identifies some criteria for creating a positive effect for technology. The most important of them are evaluating technology according to its pedagogical use and integrating technology successfully in the curriculum.

Resistance to using computer-based learning is usually attributed to the technology phobia. Bloom (1985) affirms that student resistance to using computers in learning is related to computer anxiety or computer phobia. However, this study was conducted more than twenty years ago. Since that period, CALL has been maturing and computers have been popular and used by students all over the world. According to Bernt, Bugbee, and Alan (1990), as the computer becomes more and more common in everyday life, potential users may base their attitude toward the computer and the advantages it affords in a particular setting rather than on their reactions to their fears and anxiety of the computers. Bernt et al. (1990) conclude that attractive benefits of computer applications play a dominant role in affecting one’s attitude toward using computers.

One of the best ways to evaluate CALL is through the investigation of students’ opinions. Lasagabaster and Sierra (2003) believe that researchers should take into consideration students’ opinions when CALL programs are evaluated because students are potential contributors to the development of the language learning tools, and experts in their learning. Lasagabaster and Sierra also suggest conducting more studies regarding students’ insights and impressions, though several studies have been conducted in this regard. Many researchers support

Lasagabaster and Sierra in their suggestion. Hulstijn (2000), for instance, reports that there is a dearth of investigation studies about various methods and techniques based on electronic multimedia hardware and software.

In order to evaluate a certain CALL program, researchers should take into consideration several points. Lynch (2000) recommends establishing goals early, setting data-gathering procedures, developing ways of gathering data, investigating all participants' – like students – opinions, making ongoing assessment of the program, and giving enough time for analyzing data.

Having reviewed the previous studies about learners' attitude toward CALL, the researchers note that each focuses on investigating students' opinions in CALL for studying a specific language skill, and only a few of them have focused on the relationship between the learners' attitude and their performance in one language skill or task. This paper attempts to bridge the gap by finding out EFL learners' attitude toward using CALL for basic language skills, including Listening, Speaking, Reading, and Writing. It also aims to identify the relationship between EFL learners' attitude toward CALL and their level of achievement in EFL skills in Saudi context.

Thus, the present study investigates the following research questions:

1. What is the general attitude of Saudi learners of English toward CALL?
2. What is their attitude toward using CALL for teaching specific EFL skills?
3. Is there any significant difference in learners' preference of CALL for specific language skills?
4. Is there a correlation between learners' attitude toward CALL and their level of achievement in EFL skills?

2. METHODOLOGY

2.1. Setting

The Department of English Language and Literature at King Saud University has paced a wide step toward the integration of CALL into the EFL curriculum. Two e-learning laboratories have been built in the Department recently. They are equipped with the most up-to-date hardware and software. Each holds 40 PCs that are connected with the intranet and Internet. They are also equipped with a control system which enables the instructor to show his screen to the students' workstations, and send files to them and receive files from them. Furthermore, the laboratories contain several CALL software packages such as electronic dictionaries, a variety of instructional software, tool programs, authoring programs and testing software.

This study was conducted in the e-learning laboratories of the Department during the first semester of the academic year 2005-2006. The students who participated in this study were the ones who took Listening, Speaking, Reading and Writing as basic language skills courses. They met for two hours weekly for sixteen weeks for each course. In order to control the instructor perspective as a variable, only the sections which were taught by one instructor were included in the study. The oral skills courses-Listening and Speaking- were merged as “Listening and Speaking I” and “Listening and Speaking II” while the written skills courses-Reading and Writing-were taught as two separate courses under the names of “Reading Comprehension I” and “Reading Comprehension II,” and “Paragraph Writing”.

2.2. Participants

The sample of the study consisted of students enrolled in the basic language skills courses of Listening, Speaking, Reading and Writing. The students were enrolled in seven sections: Listening and Speaking I (31 students), Listening and Speaking II (10 students in section 1 and 18 students in section 2), Reading I (28 students), Reading II (13 students), and Paragraph Writing (12 students). The total number of students who participated in this study was 112. Some of these students took more than one of the above-mentioned courses from the same instructor during the semester but filled out the questionnaire only for one of the courses, and their level of achievement was taken into consideration for that course.

2.3. Instruments

In order to answer the questions of the study, the researchers used three instruments: instructional software and material, achievement tests, and an attitude questionnaire.

2.3.1. Instructional Software and Material

In the speaking course, students were divided into small groups. They communicated using networked computers. The instructor displayed a master screen on the students' workstation or viewed their screens on the master machine, distributed files, sent and collected coursework automatically, performed on-line chat and group chalkboard. Computer-based interaction was used for making oral interaction between pairs and among members of the groups. The instructor set the scene through sending files to each student. Students then did the tasks, using computer-mediated communication (CMC). Each student had the opportunity to express his opinion, and then each group reported the answer.

In Listening-Speaking I and Listening-Speaking II courses a set of commercially available books and their accompanying CD-ROMs were used. As

the purpose of the present study was not to test certain material and software, the names of the sources were not mentioned. The CD-ROMs included computer-based activities, and the electronic audio-visual material included on the CD-ROMs was displayed to the students' screens. Networked computers were also used for making student-student and instructor-student interaction and displaying the instructor's screen to the students' workstations. When a student needed help, he sent a message to the instructor who responded by sending an electronic message, or communicated directly with the student via headsets.

In Reading I and Reading II courses, again books from the same series were used for reading skill. Each book was accompanied by a CD-ROM which included the electronic material. Students used electronic dictionaries to find synonyms, antonyms, and meanings of related words. Students employed electronic search facility to find certain words. Students also listened to texts to find specific and general information. Moreover, the instructor sent students files about activities for pre-reading, while-reading and after-reading stages. He also provided them with annotated texts and visual files which helped students in understanding texts. The instructor also utilized computer-based exercises such as gap-filling, multiple-choice, true-false, drag and drop, etc...

In Paragraph writing course, in parallel to the syllabus of commercially available paragraph writing textbook adopted for this course, the students used the chat module which is integrated in the e-learning system of the department of English Language and Literature for written communication between students. They also used the mail module and the assignment module in the e-learning system for sending and receiving assignments to the instructor and receiving feedback about them (see the site, www.ksuengdep-elearning.com). Students also employed a word processor for checking spelling, style, and grammar errors, correcting them, and receiving feedback about them. Furthermore, the instructor used the comment facility which is accessed with the word processor for providing students with feedback about their writing.

2.3.2. Achievement Test

At the end of the semester, achievement tests were administered to evaluate the students' performance in each of the language skill courses - Listening, Speaking, Reading, and Writing. The tests were designed and administered by the researchers. Each test was given to two professors of linguistics with ample experience. They were requested to evaluate the test with regard to suitability of questions to the aims of the course, clarity of instructions, marking scheme, and appropriateness of content. Their remarks and suggestions were taken into consideration. Each test was field-tested several times. In order to ensure the reliability of each test, Cronbach's Alpha was determined to be .83 for Paragraph Writing test, .86 for Listening I test, .80 for Listening II test, .81 for Reading I test, and .83 for Reading II test.

Furthermore, to ensure the reliability of the scores, students were evaluated by two independent examiners through inter-rater reliability method. If there were differences in evaluating a student, the mean of the two scores was considered as the final grade of the student. If the difference between the evaluators was more than 10 %, the paper was given to a third evaluator, and the mean of the three scores was taken as the final grade for that student. After correcting the exam papers, the results were stored, tabulated, and analyzed to find the relationship between students' performance and their attitude toward CALL in general and toward CALL for specific language skills, and SPSS 11.5 version was used for that purpose.

2.3.3. Attitude Questionnaire

An attitude questionnaire was designed by the researchers for this study. Four versions of the questionnaire were prepared and each version included twenty items. The first 15 items were the same for all the versions and were about the effectiveness of CALL approach in general (See Appendix A). However, the next five items were different for each version and were about specific language skills. So, for example, only the students who took Reading I or II responded to reading-related five items (See Appendix B for skill-related items).

Initially, students in all sections included in this study were asked to write a paragraph about their opinion of the integration of CALL in these courses. Based on the data obtained from students, a number of items were generated for general attitude toward CALL and attitude toward CALL for specific language skills. The outline format of the questionnaire was given to the same three professors in the English Department. They were requested to evaluate the suitability of the items and clarity of rubrics. Their comments and suggestions were taken into attention. Each item was followed by a five-point Likert scale (5=agree strongly, 4=agree, 3=neutral, 2=disagree, and 1=disagree strongly). The items in the general attitude section were piloted, and initially Cronbach's Alpha was run and determined to be .76. However, after two of the items strongly affecting the Alpha level were deleted, Alpha level rose up to .82. The two items which were deleted were "CALL is useful in language learning" and "I feel more comfortable in a computer lab than in a classroom". However, due to the limited number of items for the specific skills, Cronbach's Alpha was not run for items about the language skills.

2.4. Procedure

The students who participated in this study studied basic language skills of Listening, Speaking, Reading and Writing in a CALL environment for one semester. At the end of the semester, a final test for each skill course was administered to the students and only the results of these tests were taken into consideration in the comparison of results for the level of achievement. Students were also asked to fill out the attitude questionnaire right after they finished their

exams. They were told about the aims of the study and asked to give their opinions about the use of CALL for teaching and learning EFL skills. It took between 15-20 minutes for students to fill out the questionnaire. Students' grades for specific language skills and their responses to the questionnaires were stored. The results were tabulated and analyzed to find the students' attitude toward using CALL and the relationship between their attitude and the level of achievement.

2.5. Statistical Analysis

In order to identify the general student attitude toward CALL, student responses for each of the items in the first section of the questionnaire were tallied, and the mean and standard deviation for each item and for the total were calculated. Similarly, the same method in identifying the student attitude for each language skill was followed. A one-way ANOVA was used to see if there was any significant difference among the four language skills with regard to student attitude toward the use of CALL for them at $p < .05$ level. Next step of data analysis included the calculation of Pearson correlation coefficients in order to see if there was any correlation between student attitude toward CALL and level of achievement in specific language skills. For all descriptive and inferential statistics SPSS 11.5 version was used.

3. RESULTS

3.1. General Student Attitude toward CALL

As the students' general attitude toward using computers in language learning was expected to have a further impact on their attitude toward using computers in training for specific language skills, we first wanted to identify the students' general attitude toward CALL. In order to do that, we administered 'General Questions' section of the attitude questionnaire which included a series of 15 items (See Appendix A) to all the students who participated in this study.

Table 1

General Student Attitude toward CALL (5 = strongly agree – 1 = Strongly disagree)

Item	5		4		3		2		1		Mean	SD
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
01	59	52.7	36	32.1	10	8.9	4	3.6	3	2.7	4.28	.96
02	51	45.5	48	42.9	8	7.1	3	2.7	2	1.8	4.27	.85
03	55	49.1	35	31.3	16	14.3	5	4.5	1	.9	4.23	.92
04	73	65.2	28	25.0	8	7.1	1	.9	2	1.8	4.50	.81
05	38	33.9	42	37.5	21	18.8	3	2.7	8	7.1	3.88	1.12
06	43	38.4	47	42.0	12	10.7	4	3.6	6	5.4	4.04	1.06
07	55	49.1	41	36.6	9	8.0	4	3.6	3	2.7	4.25	.94
08	53	47.3	31	27.7	23	20.5	3	2.7	2	1.8	4.16	.96
09	63	56.3	33	29.5	12	10.7	3	2.7	1	.9	4.37	.85
10	60	53.6	27	24.1	17	15.2	4	3.6	4	3.6	4.20	1.05
11	47	42.0	34	30.4	26	23.2	2	1.8	3	2.7	4.07	.98
12	56	50.0	40	35.7	14	12.5	--	--	2	1.8	4.32	.82
13	43	38.4	42	37.5	23	20.5	3	2.7	1	.9	4.09	.87
14	53	47.3	37	33.0	18	16.1	2	1.8	2	1.8	4.22	.90
15	65	58.0	31	27.7	10	8.9	5	4.5	1	.9	4.37	.89

As can be seen in Table 1, the general student attitude was quite positive toward CALL. The overall mean for all the items included in this section was 4.22 on a five-point Likert scale, which means that students who have been recently exposed to CALL in their language learning experience have a general positive attitude toward their new experience in general. However, certain items had lower and higher means when compared with the general student attitude mean. For example, Item 5 ‘CALL is a more casual way of learning’ had the lowest mean score (3.88). For this item, only 33.9% of the students ‘strongly’ agreed. Similarly, Item 6 ‘I benefit more from the group/pair work in a CALL class’ and Item 11 ‘I can understand everything we do in CALL classes’ had lower means compared to other items on the questionnaire (4.04 and 4.07), respectively.

There were also some items which had noticeably higher means than the general mean. Item 4 ‘I can get more feedback in CALL classes’ had the highest mean score (4.50). This was followed by Item 9 ‘I can practice all language skills

in a CALL environment’ and Item 15 ‘I do not have technical problems in using computers during CALL classes’ (4.37 both).

3.2. Student Attitude toward CALL for Specific Language Skills

In order to identify the students’ attitude toward the use of CALL for the basic language skills of Listening, Speaking, Reading and Writing separately, specific language skill items of five for each were administered to students who took those courses in the CALL environment (see Appendix B for the questionnaire items for each skill). Table 2 presents the results of the five items which were administered to the students who took Listening as a separate skill course in addition to the general attitude section of the questionnaire.

Table 2

Student Attitude toward CALL for Listening Skill (5 = strongly agree – 1 = Strongly disagree)

Item	5		4		3		2		1		Mean	SD
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
01	40	67.8	12	20.3	5	8.5	--	--	2	3.4	4.49	.91
02	41	69.5	12	20.3	4	6.8	--	--	2	3.4	4.52	.89
03	34	57.6	17	28.8	6	10.2	2	3.4	--	--	4.40	.81
04	36	61.0	18	30.5	4	6.8	1	1.7	--	--	4.50	.70
05	38	64.4	16	27.1	4	6.8	1	1.7	--	--	4.54	.70

The general mean for Listening skill was 4.59, which means that students had a positive attitude toward CALL for Listening in general. Out of these five items, Item 5 ‘Listening via computers is more useful in understanding the content when supported with visual information’ had the highest mean and the lowest standard deviation (M = 4.54, SD = .70). This shows that students find visual information support to listening beneficial, which is quite easily possible in a CALL environment. The low standard deviation also shows that most of the 59 students included in this section homogeneously agree on the benefit of visual information support.

On the other hand, Item 3 ‘I can understand everything the teacher says via headsets clearly during CALL classes’ had the lowest mean score (4.40) among the items for Listening skill. However, such a mean with a lower standard deviation (.81) still shows that students have a positive attitude toward hearing the teacher via headsets. Other items had mean scores that fell between the highest and the lowest mean scores just mentioned.

As the next basic language skill, we focused on Speaking, and the five items included in the questionnaire yielded the results presented in Table 3.

Table 3

Student Attitude toward CALL for Speaking Skill (5 = strongly agree – 1 = Strongly disagree)

Item	5		4		3		2		1		Mean	SD
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
01	32	54.2	19	32.2	4	6.8	--	--	4	6.8	4.27	1.08
02	30	50.8	18	30.5	8	13.6	1	1.7	2	3.4	4.23	.98
03	34	57.6	17	28.8	5	8.5	1	1.7	2	3.4	4.35	.96
04	42	71.2	11	18.6	5	8.5	1	1.7	--	--	4.59	.72
05	38	64.4	12	20.3	5	8.5	2	3.4	2	3.4	4.38	1.01

The general mean score for Speaking was 4.36 and the highest mean score (4.59) was for Item 4 ‘I have the options to hear different accents for the pronunciation’ with an of .72 which is the lowest in the group. It means that most of the students (42 out of 59) share the same opinion for this item as it can also be seen in Table 3. Obviously, they think that having this option contributes to their speaking skill. Item 2 ‘ I have the opportunity to interact/speak with everybody in pairs/groups in speaking courses via computers’ had the lowest mean score for Speaking (4.23). Even though the system in the CALL labs has all these options and they have been exploited, some students may be feeling limited as it is not in-person kind of interaction, and thus have such a feeling.

For Reading skill, the total number of the students was 41 which included students from both levels (Reading 1-28 students and Reading 2-13 students). The general mean score for this group was 4.32, and this also shows that the students who took Reading in the CALL environment also had quite a positive attitude toward CALL. Table 4 presents the results for Reading.

Table 4

Student Attitude toward CALL for Reading Skill (5 = strongly agree – 1 = Strongly disagree)

Item	5		4		3		2		1		Mean	SD
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
01	27	65.9	8	18.5	5	12.2	1	2.4	--	--	4.48	.81
02	21	51.2	14	34.1	4	9.8	2	4.9	--	--	4.31	.84
03	21	51.2	11	26.8	7	17.1	1	2.4	1	2.4	4.21	.98
04	24	58.5	10	24.4	--	--	2	4.9	5	12.2	4.12	1.38
05	26	63.4	10	24.4	4	9.8	1	2.4	--	--	4.48	.77

According to the results in Table 4, the highest mean score was 4.48 for Item 1 ‘It is easy to access the meaning of words while reading in CALL classes’ and Item 5 ‘Reading via computers is more interesting when supported with visual information’. As CALL for Reading included annotated texts and electronic dictionary use, students had the opportunity to compare their new experience in that sense and found CALL activities for reading useful. They also ranked ‘visual information’ item at the same level, which means that students think that visual information which is easily presented via computers is supportive in their reading comprehension. The lowest mean score (4.12) was for Item 4 ‘I prefer to study reading via computers’. Even though students had higher mean scores for other reading-related items, they did not always want to have their reading in a complete CALL environment.

The last skill which was included in this study was writing. As the student groups were intact and due to the number of students who were taking writing with one of the researchers who taught this skill in a CALL environment, the number of students was only 12, and the data based on this limited group is presented in Table 5.

Table 5

Student Attitude toward CALL for Writing Skill (5 = strongly agree – 1 = strongly disagree)

Item	5		4		3		2		1		Mean	SD
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
01	5	41.7	3	25.0	3	25.0	1	8.3	--	--	4.00	1.04
02	10	83.3	1	8.3	--	--	1	8.3	--	--	4.66	.88
03	7	58.3	3	25.0	2	16.7	--	--	--	--	4.41	.79
04	8	66.7	3	25.0	--	--	1	8.3	--	--	4.50	.90
05	7	58.3	4	33.3	--	--	1	8.3	--	--	4.41	.90

General mean for the student attitude toward CALL for Writing was 4.40, and the highest mean (4.66) was for Item 2 ‘Computers help me self-correct my spelling, grammar and style errors’. From the previous research for Writing, it is known that these aspects of CALL have been frequently exploited for feedback and correction purposes, and have been usually favored by students. This item was followed by 4, 3 and 5, respectively (with the means of 4.50, 4.41 and 4.41). The lowest mean (4.00) was for Item 1 ‘Computer-based in-class chatting with my classmates helps me write and learn from them’. Even though this aspect of CALL is commonly exploited, the 12 students who participated in this study had the lowest positive attitude toward it.

3.2. Comparison of Students’ Attitude toward the Use of CALL for Specific Language Skills

After dealing with specific language skills separately, we also wanted to see if there were any significant differences between the mean scores of students’ attitude toward these skills, for which the ANOVA results are presented below.

Table 6

Comparison of Students’ Attitude toward the Use of CALL for Specific Language Skills

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.285	3	.762	2.560	.057
Within Groups	49.685	167	.298		
Total	51.970	170			

All four skill groups were compared using one-way ANOVA, and as can be seen in Table 6, there were no significant differences among the students' attitude toward specific language skills ($F = 2.56$, $df = 3$) at $p < .05$ level, but students' attitude means could be ranked from the highest to the lowest. Listening had the highest mean score (4.59), and this was followed by Writing (4.40), Speaking (4.36) and Reading (4.32). Such a result shows that CALL is more favored for Listening and Writing skills.

3.3. Student Attitude toward CALL for Specific Language Skills and the Level of Achievement

In order to see if the students' attitude was meaningful in terms of their achievement in the skills courses included in this study, we compared the means of their overall scores with the means of their attitude toward CALL for the skills of Listening, Speaking, Reading and Writing as shown below.

Table 7

Student Attitude toward CALL for Specific Language Skills and Level of Achievement

Skill	Score		Attitude		Correlation	Sig.
	Mean	Mean	Mean	Mean		
Listening	62.25	11.92	4.59	.39	.098	.460
Speaking	60.38	13.00	4.36	.62	.133	.317
Reading	64.85	11.80	4.32	.53	-.113	.481
Writing	61.33	10.89	4.40	.75	-.312	.323

Pearson correlation coefficients between student scores in skills courses and their attitude toward CALL for these specific skills did not yield any significant results. However, when the results were compared descriptively, a certain pattern emerged at least for some of the skills. For example, while students had the lowest attitude mean (4.32) for Reading, they had the highest mean in their overall score for this skill (64.85), which can also be seen in the negative correlation for this skill (-.113) even though it is not significant. There seems to be also a reverse interaction between students' attitude in Writing and their scores. While the students had an attitude mean of 4.40 for Writing which is higher than the Reading (4.32), they had an overall score mean (61.33) which is lower than the one for Reading (64.85). Similarly, while Listening had the highest mean for attitude (4.59), students did not have the highest overall score mean for this skill (62.25).

4. DISCUSSION AND CONCLUSION

Based on the findings of this study, it can be extrapolated that students in general have a positive attitude toward the integration of CALL into the curriculum for teaching basic language skills in the institute where they were exposed to CALL for Listening, Speaking, Reading and Writing skills. Feedback from the teacher and the opportunity to practice all language skills seem to be the standing out factors for their positive attitude toward CALL. This finding has been supported by other research done to identify student attitude toward the integration of CALL into the curriculum. For example, Ayres (2002) found that “learners appreciate and value the learning that they do using the computers” (p. 247) and that 80% of the students see CALL as relevant to their needs. Graff (2003) also reported that student’s attitude toward online learning and assessment was positive for the tasks of doing literature search online, online discussion and online assessment. Similarly, Greenfield (2003) found that 84% of the students who were included in her study indicated a preference for learning English with computers in their interview responses. Klassen and Milton’s (1999) comparison of multimedia enhanced mode and traditional mode of teaching in Hong Kong, Lasagabaster and Sierra’s (2003) study of evaluating CALL software programs, Beauvois and Eledge’s (1996) study of students’ attitude toward computer-assisted classroom discussion and Aacken’s (1999) study of CALL for Kanji yielded positive results for CALL.

Even though students have a general positive attitude toward CALL, there also seems to be some resistance to the employment of CALL for various reasons. Gunn and Brussino (1997) draw our attention to some non-practical reasons for that and state “teachers with full workloads and satisfactory outcomes from existing methods of course delivery are not necessarily motivated to venture into the uncharted water of technology-based developments which are sometimes hard to access, often unreliable and always costly” (p. 21).

The second step of this study which included the investigation of student attitude toward CALL for specific language skills revealed that they generally have a positive attitude toward CALL for all language skills, but CALL seems be favored especially for Listening and Writing skills which are followed by Speaking and Reading. Lasagabaster and Sierra (2003) reported a similar finding and stated that students mostly used the computer software for listening purposes and enjoyed the listening activities most. Klassen and Milton (1999) who looked into students’ actual performance found that students who studied multimedia enhancement performed significantly better compared to the traditional way. Visual information support, which can be done the best via computers, was the questionnaire item which had the highest mean score in our research for Listening.

On the other hand Ayres (2002) reported that CALL was favored the most for Writing and this was followed by Reading, Listening and Speaking. Other research also reported positive results especially for Writing. For example,

Cunningham (2000) reported that 88% of the students believed that the computer helped them improve their writing skills, and they stated that word processing helped them with some aspects of their writing, such as mechanics and organization. One of the reasons why Hong Kong students in Greenfield's (2003) study yielded a positive attitude toward CALL was that computers facilitated the correction of spelling and punctuation mistakes. A similar item was included in our questionnaire, and it had the highest mean score for Writing. Liu, Moore, Graham and Lee (2003) also reported some researchers' perspective on students' writing via computers and presented two aspects: The first is that students enjoy and appreciate writing of routine assignments by using word processing software (Greenia, 1992; Scott & New, 1994 cited in Liu et al. 2003), and the second is that the quality of writing via computers is not proved to be better than that of writing produced in traditional ways (Hyland, 1993 cited in Liu et al. 2003).

Speaking was the third in ranking based on the general mean score for each skill, and the item which included 'different accents for pronunciation' contributed the most to the general mean for this skill. On the other hand, the item about the interaction among students via computers had the lowest mean score even though all kinds of interaction including pair, group and class work were exploited, which may be attributable to the fact that students would like to get body language support when interacting with each other in the foreign language they are practicing orally, and this is what is missing in a CALL environment. This is to a certain extent supported by Oliva and Pollastrani's (1995) finding that students preferred classroom discussions to working at computers. On the other hand, Roed (2003) claims that virtual learning environment may provide a more stress-free atmosphere and thus result in increased language production.

Reading had the lowest mean score among the language skills. Accessing vocabulary meaning in a CALL environment and visual information support were the two most favored reasons for CALL in Reading. In this sense, Ritter (1993) reported that 92% of the students preferred learning new vocabulary using a computer program, which may be considered as a kind of support for our finding even though we did not focus on vocabulary teaching in this study. Students had the lowest mean score for the item which asked them about their preference for computers in Reading. Even though this is the result for students' attitude in our study, Adair-Hauck and Willingham-McLain (1999) reported that the students who were included in the CALL group performed better than the ones included in the traditional way did.

We also compared students' attitude toward the use of CALL for specific language skills to see if the differences between the skills were statistically significant. Even though the F ratio was 2.56, the result was not found to be significant. It means that the attitude of the students who studied these skills in a CALL environment did not differ for the skills we focused on, and in general they were positive for all the skills.

As a further step in our analysis, we also looked into the correlation between student attitude toward CALL for specific language skills and the level of achievement, and did not find a significant correlation between students' attitude toward CALL for any of the language skills and their scores. A similar finding was reported by Graff (2003) who stated that there was no correlation between students' attitude toward using computers and their performance in task types they were assigned.

As a conclusion, based on the results of this study and the support gained from literature, it can be claimed that most of the experience with CALL is idiosyncratic, and its results depend on so many contextual and even personal factors. However, it does not mean that computers cannot be exploited in language teaching. This is a time when computers play such an important role in human life in so many ways that it is impossible to exclude them from the field of language learning. Thus, we should find ways to exploit them in the best possible way. A further step may include the comparison of CALL classes and traditional classes for specific language skills and even for specific activities to identify what works better in which environment.

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APPENDIX A
GENERAL ATTITUDE ITEMS

5= Strongly Agree ↔ 1= Strongly Disagree		5	4	3	2	1
1	I can access extra information more easily during a CALL class.					
2	After taking CALL courses, I know how to benefit from my PC to improve my English.					
3	CALL is a stress-free environment to learn English.					
4	I can get more feedback in CALL classes.					
5	CALL is a more casual way of learning.					
6	I benefit more from the group/pair work in a CALL class.					
7	I feel comfortable enough to share my ideas in English during CALL classes.					
8	My achievement can be measured in different ways in a CALL class.					
9	I can practice all language skills in a CALL environment.					
10	I know more about how to use computers after having taken CALL courses.					
11	I can understand everything we do in CALL classes.					
12	It takes less time to explain something during CALL classes.					
13	I have become a better problem-solver after using the computer while learning English.					
14	CALL has helped me become an independent learner.					
15	I do not have technical problems in using computers during CALL classes.					

APPENDIX B

ATTITUDE ITEMS FOR SPECIFIC LANGUAGE SKILLS

Listening Questions		5	4	3	2	1
01	I prefer computers to tape recorders in listening in listening classes.					
02	Sound is clearer via computers in listening classes.					
03	I can understand everything the teacher says via headsets clearly during CALL classes.					
04	Computers help me identify the key words when listening is supported with visual activities.					
05	Listening via computers is more useful in understanding the content when supported with visual information.					

Speaking Questions		5	4	3	2	1
01	I prefer CALL to traditional classrooms for speaking classes.					
02	I have the opportunity to interact/speak with everybody in pairs/groups in speaking courses via computers.					
03	I get immediate feedback with my pronunciation.					
04	I have the options to hear different accents for the pronunciation of a word.					
05	I feel comfortable in expressing what I want to say orally.					

Reading Questions		5	4	3	2	1
01	It is easy to access the meaning of words while reading in CALL classes.					
02	Computer activities make our job easier in reading textbooks.					
03	In reading courses, listening to the written text helps me comprehend better as I can hear the intonation, stress, ...					
04	I prefer to study reading via computers.					
05	Reading via computers is more interesting when supported with visual information.					

Writing Questions		5	4	3	2	1
01	Computer-based in-class chatting with my classmates helps me write and learn from them.					
02	Computers help me self-correct my spelling, grammar and style errors.					
03	I can get immediate feedback with my writing.					
04	I can organize my paragraphs better when I write via computers.					
05	I prefer computers to a textbook in writing courses.					