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The Impact of Online Activities on Armenian EFL

Learners' Achievement

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We hereby approve that this thesis

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The Impact of Online Activities on Armenian EFL Learners' Achievement

be accepted in partial fulfillment for the requirements of the degree of

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Dedication

To my mother

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Abstract

Computers and the Internet are so widespread in education in general and in language teaching profession in particular, that one feels outdated and unimportant if not using them. They are considered to help teachers in making language learning faster, easier and more engaging, and help creating an optimal language-learning environment.

Thus, the purpose of this study was to explore whether the addition of computer assisted language learning (hereinafter: CALL) to traditional instruction would have a positive effect on Armenian EFL contexts. The effectiveness of this treatment was investigated through a pre-posttest quasi-experimental design. To enrich quantitative data, qualitative data was also collected. Although the treatment with CALL in this study did not produce statistically significant effects on increasing Armenian EFL learners' overall level of language proficiency, students were more enthusiastic and autonomous in their learning towards the CALL than towards the 'traditional' one.

Chapter 1: Background and Purpose

Introduction

In recent years, there has been much research about various aspects of teaching and learning a second language. One of the most significant recent developments that have influenced teachers and learners in language education programs is educational technology, in particular the use of the computer in the language classroom (Warschauer, 2000; Chapelle, 2000; Levy, 2000).

Nowadays, there are numerous uses of Computer Assisted Language Learning (CALL) in teaching and learning English. Some of them include the use of CALL in teaching and learning English through multimedia-based CD ROMs, E-mail and the Internet, as well as more traditional word processing and instructional software.

Research in the field of computer-assisted language learning has certainly developed in the last 20 years (Warschauer, 1996, 2000; Chapelle, 1998, 2000; Levy, 2000, 1997; Chapelle, & Hegelheimer, 2000; Kern, 1995; Sullivan & Pratt, 1996; Dunkel, 1991). However, there appears to be no studies of the issues, problems, and potential solutions relating to the impact of computers on English language teaching and learning within an Armenian EFL context.

In Armenian EFL setting, despite the glamour of technology which teachers can see in the films or read in the articles, they are still far from using technology (i.e. computers) at schools or even at universities. Some of the reasons for such an underdeveloped situation are:

1. bad connection,
2. slow browsing,

3. some students do not post any responses if not prompted by the instructor

4. some students do not take online instruction seriously,

5. using the internet as a learning tool may not be part of some students' culture. Some are used to traditional instruction that depends on the book (Al-Jarf and Reima Sado (2005)

Computer assisted language teaching and learning is novice and not developed in Armenia, so this study can serve as a starting point to find out whether it is worth using computers and on-line internet activities in classroom settings or not.

The primary purpose of this study, then, was to determine to what extent on-line activities influence on students' achievement in learning English. A secondary purpose is to see whether the computer motivates students to use computer for language learning beyond the classroom.

1.1. Significance of the Study

The current study is significant for several reasons. First, as we are in the 21st century where technology domains, and in order the education also not to be apart of it, I will try to show that on-line activities through internet can be of great use for students: they can supplement to regular teaching. Second, I will try to show that students will have the opportunity to become more autonomous while implementing CALL activities (Al-Jarf and Reima Sado (2005).

The research is guided by the following two research questions, which are:

• Does computer assisted language learning have any effect on students' achievement of learning English?

- Does the continuous practice with computer motivate students to use computer for language learning beyond the classroom?

1.2. Structure of the Thesis

This thesis, apart from the background and purpose introduction, consists of the following chapters: review of the related literature, methodology, results and discussion, and conclusions, implications, and suggestions for further research. In the review of related literature chapter, the historical development of CALL and its three phases are provided. Benefits and barriers of the CALL, the role of PowerPoint presentations and the affective filters in language learning while using computer are also illustrated in this chapter. The methodology chapter presents the procedures, participants and instruments used in this study. The results and the discussion chapter provide data analysis and results with detailed discussion. Finally, the chapter conclusions, implications, and suggestions for further research summarizes the research findings, presents the limitations of the study, makes suggestions for further research, and discusses the contribution of the research.

Chapter 2: Review of the Related Literature

Introduction

To provide an appropriate context for this research, it is necessary to review the literature related to it. Several issues are discussed in the literature review concerning the history of Computer Assisted Language Learning (CALL). First, an explanation of CALL is provided, and the development of CALL through three phases proposed by Warschauer (1996) is explained. Second, contradicting ideas about CALL's history through the research done by Bax (2003) are presented. Third, the advantages and disadvantages of Internet, and how computer implementation in the classroom changes teachers and students' roles are illustrated. At the same time, the benefits and difficulties that CALL can have during teaching and learning English are discussed. Finally, the effect and the role of PowerPoint in the classroom are discussed.

2.1 History of CALL

Computer technology was introduced to the world of education as recently as 50 years ago and in the 80s, computer technology became part and parcel of education both at school and at tertiary level. Computer technology has always been considered as a medium to ease our lives and has been used as a 'tool' by many people, but its use has been limited to offices. Many people would agree that computer technology is not only used to create a comfortable and easy life for all of us but is also used to increase our knowledge (Mustafar, 2006).

In a few years back especially in the 1980s, having computers at homes and in the classrooms was considered an odd and unusual scenario, but in the 21st century, having a computer at home and/or even at school is considered a common situation.

Jonassen (1999) proposes that computer technology can serve as a tool in education and that it can be used "to engage students in important, challenging work and to cause those to discuss this work with others and to think deeply about it themselves" (cited in Reigeluth 1999, pp. 215-216). Analyzing this claim, Jonassen (1999) asserts that computer technology can be used as a medium to make learning more fun. Computer technology can be improved and varied according to the needs of the students and depending on the teacher's creativity. The integration of computer technology can improve the students' performance in academic and also non-academic education (Jonassen, 1999).

Taylor (1980) claims that computer assisted language learning programs can be wonderful stimuli for foreign language learning. English as a Foreign Language (EFL) is often taught under unfavorable conditions, and, as a result, high school graduates are not always competent users of English (Mayora, n.d.). EFL teachers, who are familiar with this situation can profit from computer technology by sharing information and by using by investigating the various alternatives available to improve EFL instruction.

One of the most important alternatives of improving EFL instruction is the advantage of the ongoing advances in multimedia technology and the effort for the integration of this technology in the in-class instruction. As Li-Ling (2004) states "Language instruction that integrates technology has become popular and has had tremendous impact on language education" (p. 56)? The use of technology, in this case computers and internet, in the EFL classroom are considered to be the tools of Computer Assisted Language Learning. CALL came of age in the early 1960s (Kern & Warschauer, 2000).

Different researchers explain CALL differently. Levy (1997) defines computer- assisted language learning (CALL) as "the search for and study of application of the computer in

language teaching and learning" (1997, p.1).According to Chapelle, CALL was the expression agreed upon the 1983 TEOL convention in a meeting of all interested participants. "This term is widely used to refer to the area of technology and second language teaching and learning despite the fact that revisions for the term are suggested regularly" (Chapelle, 2001, p.3). Beatty (2003) explains CALL in the following way: "any process in which a learner uses a computer and, as a result, improves his or her language". Moreover, he states that CALL has come to encompass issues of materials, design, technologies, pedagogical theories and modes of instruction. "Materials for CALL can include those which are purpose-made for language learning, and those which adapt existing computer-based materials, video and other materials" (Beatty, 2003, pp. 7-8).

All the explanations mentioned above help us to have a general idea what CALL is, but in order to understand how it has appeared, and what kind of changes it has passed through we need to look at the phases that CALL has undergone. According to Warschauer (1996), CALL is categorized in terms of three distinct phases, which he refers to as *behavioristic CALL, communicative CALL*, and *integrative CALL.*

2.1.1 Behavioristic CALL

The first phase of CALL, conceived in the 1950s and implemented in the 1960s and '79s, was based on the then-dominant behaviorist theories of learning. Programs of this phase entailed repetitive language drills and as Warschauer (1996) notes they can be referred to as 'drill and practice' (or as "drill and kill").

According to Taylor (1980) drill and practice courseware is based on the model of *computer as tutor* (cited in Warschauer 1996). In other words, the computer serves as a vehicle for delivering instructional materials to the student. The basis behind drill and

practice was not totally spurious, which explains in part the fact that CALL drills are still used today. Briefly, they are the followings:

- Repeated exposure to the same material is beneficial or even essential to learning

- A computer is ideal for carrying out repeated drills, since the machine does not get bored with presenting the same material and since it can provide immediate non-judgmental feedback

- A computer can present such material on an individualized basis, allowing students to proceed at their own pace and freeing up class time for other activities (Waschauer, 1996,p 2)

Based on these notions, a number of CALL tutoring systems were developed for the mainframe computers, which were used at that time. One of the most sophisticated of these was the PLATO system (Warschauer, 1996). The PLATO system includes vocabulary drills, brief grammar explanations and drills, and translation tests at various intervals (Ahmed, Corbett, Rogers and Sussex 1985, in Warschauer, 1996).

In the late 1970s and early 1980s, behavioristic CALL was undermined by two important factors. Firstly, behavioristic approaches to language learning had been rejected at both the theoretical and the pedagogical level. Secondly, the introduction of the microcomputer allowed a whole new range of possibilities. The stage was set for a new phase of CALL (Warschauer, 1996).

2.1.2 Communicative CALL

The second phase of CALL was based on the communicative approach to teaching which became prominent in the 1970s and 80s. Proponents of this approach felt that the drill and practice programs of the previous decade did not allow enough authentic communication to be of much value (Warschauer, 1996, p.1).

One of the main advocates of this new approach was John Underwood, who in 1984 proposed a series of "Premises for 'Communicative' CALL". According to Underwood, communicative CALL:

- focuses more on using forms rather than on the forms themselves;

- teaches grammar implicitly rather than explicitly;

- allows and encourages students do to generate original utterances rather than just manipulate prefabricated language;

- does not judge and evaluate everything the students nor reward them with congratulatory messages, lights, or bells;

- avoids telling students they are wrong and is flexible to a variety of student responses;

- uses the target language exclusively and creates an environment in which using the target language feels natural, both on and off the screen; and

- will never try to do anything that a book can do just as well. (1984, p. 52)

As Warschauer claims, another critic of behavioristic CALL according to Vance Stevens is that all CALL courseware and activities should build on intrinsic motivation and should foster interactivity - both learner-computer and learner-learner (Stevens, 1989).

Several types of CALL programs were developed and used during this phase of communicative CALL. First, there was a variety of programs to provide skill practice, but in a non-drill format. In these programs, like the drill and practice programs mentioned above, the computer remains the "knower-of-the-right-answer" (Taylor & Perez 1989); thus, this represents an extension of the *computer as tutor* model. However, in contrast to the drill and practice programs - the process of finding the right answer involves a fair amount of student choice, control, and interaction (as cited in Warschauer, 1996).

In addition to *computer as tutor,* another CALL model used for communicative activities involves the *computer as stimulus* (Taylor & Perez 1989 in Warschauer). In this case, the purpose of the CALL activity is not so much to have students discover the right answer, but rather to stimulate students' discussion, writing, or critical thinking. Software used for these purposes include a wide variety of programs which may not have been specifically designed for language learners, programs such as *Sim City*, *Sleuth*, or *Where in the World is San Diego?* (Healey & Johnson, 1995 b, as cited in Warschauer, 1996).

The third model of computers in communicative CALL involves the *computer as tool* (Brierley & Kemble 1991; Taylor 1980) or, as sometimes called, the *computer as workhorse* (Taylor & Perez 1989). In this role, the programs do not necessarily provide any language material at all, but rather empower the learner to use or understand language. Examples of *computer as tool* include word processors, spelling and grammar checkers, desk-top publishing programs, and concordances (as cited in Warschauer, 1996).

Definitely, as Warschauer states, the distinction between these models is not absolute. There are a number of drill and practice programs, which could be used in a more communicative fashion - if, for example, students were assigned to work in pairs or small groups, and then, compare and discuss their answers. "The dividing line between behavioristic and communicative CALL involves not only *which* software is used, but also *how* the software is put to use by the teacher and students" (Warschauer, 1996:3).

However, this phase had some mismatches and didn't satisfy the needs of the teaching and learning, thus a new search for better ways of teaching, i. e. in a more integrative manner than it used to be, started (Kenning & Kenning 1990; Pusack & Otto 1990; Rüschoff 1993).

Moreover, as Warschauer mentions "the challenge for advocates of CALL was to develop models which could help integrate the various aspects of the language learning process. Fortunately, advances in computer technology were providing the opportunities to do just that" (Warschauer, 1996, p.4).

2.1.3 Integrative CALL: Multimedia

Integrative approaches to CALL are based on two important technological developments of the last decade - multimedia computers and the Internet. Multimedia technology - exemplified today by the CD-ROM - allows a variety of media (text, graphics, sound, animation, and video) to be accessed on a single machine. What makes multimedia even more powerful is that it also entails *hypermedia*. That means that the multimedia resources are all connected to each other and that learners can navigate their own path simply by pointing and clicking a mouse (Warschauer, 1996, p.2)

Hypermedia proposes a number of advantages for language learning. First, a more authentic learning environment is created, as listening is joined with seeing, just like in the real world. Second, all four skills are easily integrated, since the diversity of media make it natural combining reading, writing, speaking and listening in a single activity. Third, students have greater control over their learning, since they can not only go at their own pace but even on their own individual path, going forward and backwards to different parts of the program. Finally, a major advantage of hypermedia is that it facilitates a principle focus on the content, without diminishing a secondary focus on language form or learning strategies.

An example of how hypermedia can be used for language learning is the program *Dustin* developed by the Institute for Learning Sciences at Northwestern University (Schank & Cleary 1995 in Warschauer 1996). The program is a simulation of a student arriving at a U.S.

airport. The student must go through customs, find transportation to the city, and check in at a hotel. The language learner using the program assumes the role of the arriving student by interacting with simulated people who appear in video clips and responding to what they say by typing in responses. If the responses are correct, the student is sent off to do other things, such as meeting a roommate. If the responses are incorrect, the program takes remedial action by showing examples or breaking down the task into smaller parts. At any time the student can control the situation by asking what to do, asking what to say, asking to hear again what was just said, requesting a translation, or controlling the level of difficulty of the lesson.

Nevertheless, in spite of the noticeable advantages of hypermedia for language learning, multimedia software has so far failed to make a major impact. Several major problems have surfaced concerning exploiting multimedia for language teaching.

First, the question of quality of available programs has come to the forefront. Though teachers themselves could possibly develop their own multimedia programs using authoring software, the reality is quite different: most classroom teachers lack the training or the time to make even simple programs, let alone more complex and sophisticated ones such as *Dustin*. This has left the field to commercial developers, who often fail to base their programs on sound pedagogical principles. Additionally, the price involved in developing quality programs can put them out of the market of most English teaching programs (Warschauer, 1996)

Moreover, according to Warschauer, beyond this lies perhaps a more fundamental problem. As Warschauer claims, today's computer programs are not yet intelligent enough to be truly interactive. A program like *Dustin* should ideally be able to understand a user's

spoken input and evaluate it not just for correctness but also for *appropriateness*. It should be able to diagnose a student's problems with pronunciation, syntax, or usage and then intelligently decide among a range of options (e.g. repeating, paraphrasing, slowing down, correcting, or directing the student to background explanations).

However, computer programs with that degree of intelligence can't be found in the real world, and are not expected to be found for quite a long time.

Thus, multimedia technology only partially contributes to integrative CALL. Using multimedia may involve an integration of skills (e.g. listening with reading), but it too seldom involves a more important type of integration - integrating meaningful and authentic communication into all aspects of the language learning curriculum. Fortunately, though, another technological breakthrough is helping make that possible - electronic communication and the Internet (Warschauer, 1996).

In general, these stages seem to have followed the evaluation of language learning approaches. The use of computer –mediated communication is a new one, and seems to fit with the current trend of language learning, the communicative approach. Warschauer and Healey (1998) posit that it is the advent of computer-mediated communication, which has changed the way computers are used in the second language classroom (Motamadi, 2009, p.35).

The Internet

Computer Mediated Communication (CMC), which has existed in primitive form since the 1960s but has only become widespread recently, is probably the single computer application to date with the greatest impact on language teaching (Warschauer, 1996, p.3)

For the first time, language learners can talk directly, cheaply, and easily with other learners or speakers of the target language 24 hours a day, from school, work, or home. This communication can be asynchronous (not simultaneous) through tools such as electronic mail (email), which allows each participant to compose messages at their time and pace, or it can be synchronous (synchronous, "real time"), using programs such as Skype, Facebook or Odnoklassniki, which allow people all around the world to have a simultaneous conversation by typing at their keyboards. It also gives chance for not only one-to-one communication, but also one-to-many, allowing a teacher or student to share information with a small group, the whole class, a partner class, or an international discussion list of hundreds or thousands of people.

Computer Mediated Communication gives the users opportunity to share not only brief messages, but also long (formatted or unformatted) documents - consequently assisting collaborative writing - and also graphics, sounds, and video. Using the World Wide Web (WWW), learners can search through millions of files around the world within minutes to locate and access authentic materials (e.g. newspaper and magazine articles, radio broadcasts, short videos, movie reviews, book excerpts) exactly in harmony with their own personal interests (Warschauer,1996).

2.1.4 Critique of Warschauer's Phases

The ways the history of CALL, its phases and tools have been illustrated in this literature review were mainly based on the historical review of CALL by Warschauer. However, there are researchers who disagree with some aspects of the CALL's history that Warschauer presents. One of them is Bax, who also goes through all levels that CALL has passed through

up to now and shows several mismatches what Warschauer and others say about the history of CALL and what the reality is, in his opinion,.

According to Bax (2002), the way Warschauer has presented the phases of CALL is significantly important for providing a general idea about the development of CALL. However, despite the popularity of Warschauer's analysis and research Bax finds a number of weaknesses, which he thinks are worth discussing and mentioning.

In order to show the weaknesses in Warschauer's analysis, Bax presents a table, which is the summary of all three phases that Warschauer has discussed in various publications over the years.

Table 1: Warschauer's three stages of CALL

Stage	1970s-1980s: Structural CALL	1980s-1990s: Communicative CALL	21st Century: Integrative CALL
Technology	Mainframe	PCs	Multimedia and Internet
English-teaching program	Grammar-translation and audio-lingual	Communicative language teaching	Content-based ESP/EAP
View of language	Structural (a formal structural system)	Cognitive (a mentally constructed system)	Socio-cognitive (developed in social interaction)
Principal use of computers	Drill and practice	Communicative exercises	Authentic discourse
Principle objective	Accuracy	And fluency	And agency

Warschauer 2000

Warschauer's discussion of the phases of CALL shows significant differences in different publications - for example, Structural CALL previously was called Behaviouristic CALL (e.g. Warschauer and Healey, 1998). Another difference is in the dates of the three phases, for example, the table reproduced here (2000) is dated as 1970s-1980s, whereas

previously it was described as "conceived in the 1950s and implemented in the 1960s and 1970s" (Warschauer and Healey, 1998). Likewise, this slippage occurs with "Integrative CALL" also, which in the table is dated to the 21st century, while in 1998 it was said to be already in existence.

In any case, he considers all these inconsistencies not particularly important in themselves as they are minor and avoidable. He is more concerned with the categories that Warschauer considers as 'phases'. Bax mentions that of the three categories, the first, Behavioristic CALL, is perhaps the most plausible and attracts most agreement. However, the other two categories are far less satisfactory. As Bax mentions, in the first place, language teaching in general still operates today very much within a communicative framework in many teaching contexts, so it is confusing for teachers to hear that "communicative CALL" is no longer with us. Secondly, it is not at all certain that the use of the term 'communicative' is being used as language-teaching methodologists would use it.

Bax states that this list proposed by Warschauer mentioned above (p.5) is interesting for a number of reasons - for one thing, there is no mention of communication at all, which is obviously central to communicative language is teaching (CLT). Although the list according to him includes aspects, which are certainly part of CLT, he thinks that all the bases of this phase are probably Underwood's wishes. Moreover, during the period which Warschauer has termed 'communicative' (mostly 1980s), Bax argues, there was relatively little pedagogically useful communication going on in CALL, unless the teacher was unusually inventive in taking students away from the technology to communicating. This is even confirmed by Warschauer's own analysis of, why "Communicative CALL" gave way to the third phase.

Furthermore, Bax takes this as evidence that communicative CALL in the 1980s was never actually complete in any significant way.

Nevertheless, Bax claims that the most doubtful of all the phases is the third category-'Integrative CALL'. As Warschauer suggests in the late 1980s and early 1990s 'many teachers were moving away from a cognitive view of communicative teaching to a more social or socio-cognitive view, which placed greater emphasis on language use in authentic social contexts' (Warschauer and Healey, 1998).

According to Bax it is difficult to adduce evidence that teachers at the time had 'cognitive view of communicative teaching', or that teachers had previously failed to think of 'language use in authentic social contexts' (Bax, 2003, p.18). On the contrary, the use of language in authentic social contexts had surely been stressed from the very beginnings of CLT, and taken on board by some if not all teachers, and it is certainly a central part of CLT today, and to imply that it is somehow 'past communicative' is odd. Warschauer and Haeley call 'integrative' the following approaches: task-based, project-based and content-based, while Bax argues that these same approaches could be communicative as well. Thus, Bax claims that if this phase is defined based on approach to language and language teaching, then it is indistinguishable from mainstream CLT as it has developed. Moreover, if it is defined based on the use of computers in the syllabus or in classroom practice, then he suggests that there was no actual change at all. He also states that if all these changes were defined as a new hope or ambition for CALL, then there may be some validity in the category-but that is hardly a sufficient criterion for suggesting that a new historical phase of CALL was born at a particular time.

However, Bax respectfully states that Warschauer and Haeley's analysis has proven a useful way over several years of conceptualizing the development of CALL, and that Warschauer deserves a credit for his rare attempt to offer such analysis in the first place.

Bax sums up his critique of the history of CALL that Warschauer puts forward by proposing needs clarification and amendment in a number of areas:

1. it is not clear whether the phases represent clearly defined historical periods or even whether they are supposed to;

2. the validity of the characterization of the 1980s as part of 'Communicative CALL' requires more support and tighter references to mainstream CLT methodology.

3. the rationale for identifying a third phase, and then calling it 'integrative' calls for more support in terms of attitude to language and language teaching as it has not been clearly enough distinguished from communicative approaches. (Bax, 2003,p. 20)

As a solution, Bax suggests an alternative analysis of CALL. In his analysis, he calls 'phases' 'approaches'. The first approach he calls 'Restricted CALL'. He assures that this approach in terms of historical period and main features differs little from Warschauer and Haeley's 'Behaviouristic CALL'. The term 'Restricted' is more satisfactory since it allows him and everyone else to refer not only to a supposed underlying theory of learning but also to the actual software and activity types in use at the time, to the teachers' role, to the feedback offered to students and to other dimensions-all were 'restricted', but not all were 'behaviourist'. The second approach is 'Open CALL'. Here Bax states that we can see that from around 1980 there was a gradual awareness that previous approaches had indeed been Restricted, and that, new approaches were needed. Therefore, in this approach and even today much software being produced is still of a relatively Restricted type. For this reason, he

thinks that in general terms, we are in an Open phase of CALL, but each institution and classroom may also exhibit certain Restricted and even integrated features.

The last approach, he, like Warschauer, calls Integrated CALL. In order to understand the extent to which CALL is truly integrated into a classroom or into an institution or into a particular teacher's practice, he suggests drawing on research in the diffusion of innovations, looking at how an innovation comes to be accepted and effective in its new domain. (Bax, 2003, p.23)

The end goal for CALL Bax defines as 'normalization'. He explains that this term is relevant to any kind of technological innovation and refers to the stage when the technology becomes invisible, embedded in everyday practice and hence 'normalized', such as pen, shoe, writing etc. CALL hasn't reached this stage, as evidenced by the use of the very acronym 'CALL' –we do not speak of PALL (Pen Assisted Language Learning) or of BALL (Book Assisted Language Learning) because those two technologies are completely integrated into education, but CALL has not yet reached that "normalized stage" (Bax, 2003, p. 23).

He thinks that CALL will reach this state when language students and teachers use computers every day as an integral part of every lesson, like a pen or a book. They will not be the centre of any lesson, but they will play a part in almost all. They will be completely integrated into all aspects of classroom life, alongside course books, teachers and notepads. They will go almost unnoticed.

Most importantly, CALL will be normalized when computers are treated as always secondary to learning itself, when the needs of learners will be carefully analyzed first, and then the computer will be used to serve those needs. Elsewhere Bax tries to discuss in detail

what this means for CALL and the teaching of grammar, vocabulary and language skills (Bax, 2000). Technology will then be in its proper place.

These features are not widely observed now - hence his objection to the notion that we are currently in an Integrative phase. In fact he thinks that it may take several years for these practices to become commonplace. However, it is possible, Bax suggests, that the normalized state be planned, and then we can move towards it, which offers and structures our entire agenda for the future of CALL. The first step according to Bax is to identify the critical factors which normalization requires. The second is to audit the practice of each teaching context in the light of these criteria; the final step is to adjust our current practice in each aspect in order to encourage normalization.

2.2 Benefits of Computer Assisted Language Learning and Teaching

According to Han (2008), CALL is becoming more popular in foreign language learning nowadays: bringing with it the following benefits for second language learners:

- **CALL programs could offer second language learners more independence from classrooms**

One of the big differences between teachers and computers is that computers never get tired and are able to go over the same thing repeatedly without complaining. Whatever it is programmed to do, it can do over and over as often as it is necessary, which is good, in particular, for slower students. Moreover, computers can keep teaching resources for a longer time, which is almost impossible in the traditional classroom. Other students and teachers can later share the teaching resources. Thus, the computer performs as a mediator for the communication between teachers and students. In contrast to traditional second language classroom study, students can study more independently, giving the teacher more time to

focus on those parts of second language teaching that are still hard or impracticable for the computer, such as pronunciation, work on spoken dialogue or training for essay writing and presentation (Han, 2008).

- **Language learners have the option to study at anytime and anywhere**

Conventionally, learners must go to a class themselves at a fixed time and in a fixed classroom. If that place has a network of computer laboratories or the academic building id wireless, learners can use the same materials wherever they are. They can even study at home if their personal computers have an internet connection. Additionally, the teachers and students can not only get materials and information from the websites of their own country, but also from those of foreign countries.

- **CALL programs can be wonderful stimuli for second language learning**

Currently, computer technology can provide many games and communicative activities, decrease the learning stresses and anxieties, and provide repeated lessons as often as necessary. Those abilities will promote second language learners' learning motivation. Through various communicative and interactive activities, computer technology can help second language learners reinforce their linguistic skills, affect their learning attitude, and build their self-instruction strategies and self-confidence (Han, 2008). The World Wide Web is a virtual library at one's fingertips; it is a readily available world of information for teachers and language learners where both students and teachers can download very good learning and teaching materials.

- **Computers can help classroom teaching with a variety of materials and approaches**

Computers are helpful to motivate students in class. Language teaching in the past was teacher centered with the aid of blackboard, recorders and videos, which more often than not could be boring and confusing. With computers, teachers can present pictures, videos and written texts related to the class with or without sound. Students feel things are more real and more understandable. In particular, many concepts and ideas are abstract and difficult to express through language in language teaching area. Computers can make up for this shortage by using an image shown on the screen. Thus, students do not get bored so easily and they may become more active. At the same time, students can share their findings and information with teachers and classmates too, just by connecting their own computers with others in the class (Han, 2008).

- **Computers can promote learning interaction between learners and teachers**

Computer technology combined with Internet creates a bridge for students to get a huge amount of human experience and guide students to enter the "Global Community". In this way, students not only can extend their personal view, thought, and experience, but also can learn to live in the real world. Warchauer (2000) indicated that the random access to Web pages would break the linear flow of instruction. By sending E-mail and joining a newsgroup, second language learners can also communicate with people they have never met before, interact with their own teachers or classmates, and have pen pals. Inhibited or shy learners can greatly benefit from the technology-learning environment, and uninhibited learners can also go on at their own pace to achieve higher levels. The rapid development of Internet is also very useful for both students and teachers.

2.3. Barriers to Computer-Assisted Language Learning and Teaching

Although there are many benefits to computers, the application of current computer technology still has its limitations. There are many barriers to the use of computer in language learning in many different aspects related to CALL.

- **Financial barriers are the main outstanding problems**

Language teachers often have some financial barriers to the necessary hardware and software for CALL because the university administration does not spare appropriations for CALL. In addition, computer hardware, software and programs are updated continually with technological development, which puts more pressure on educators and learners who want to catch up with new technology. Some scholars have argued that CALL will increase educational costs and harm the equity of education. When computers become a basic requirement for students to purchase, low-budget schools and low-income students may not be able to afford a computer. This could cause unfair educational conditions for those poor schools and students (Mohamadi, 2009).

- **Computers cannot handle unexpected situations due to technological barriers**

Sometimes language teachers have difficulties and problems, which are related to the system, such as viruses, connection problems or problems caused by the students accidentally. Second language learners' learning situations are various and ever changing. Because of the limitations of computer's artificial intelligence, computer technology is unable to deal with learners' unexpected learning problems and reply to learners' question immediately as teachers do. The reasons for the computers' inability to interact effectively can be traced back to a fundamental difference in the way humans and computers utilize information (Dent, 2001). Blin (1999) also points out that computer technology with that

degree of intelligence does not exist, and is not expected to exist for quite a long time. To put it briefly, today's computer technology and its attached language learning programs are not yet intelligent enough to be truly interactive. People still need to put effort in developing and improving computer technology so that it will assist second language learners.

- **Both teachers and students need training to learn to use computers**

Recognition of the new technologies in language learning is an important barrier for language teachers and learners because many of them may not be interested in computers and the Internet. They will usually prefer to teach in a traditional classroom because to teach CALL lessons requires a lot of time, effort and learning about computers and the Internet besides language. Han (2008) even assumes that the reason can be that many teachers do not have enough technical knowledge about computers and the Internet and new programs and software. He continues, however, by claiming that they are developing so fast that teachers sometimes feel they need to learn a new program. This will definitely add the workload of teachers, who are already working under great pressure. Regarding to the students, it will take them a long time and a lot of energy to learn the basic skills for using a computer (Han, 2008, p.4). All these turn to be another barrier to language learners and teachers. Thus, taking into account all these facts teachers and students' roles change:

Teachers

"Although the integration of CALL into a foreign language program can lead to great anxiety among language teachers, researchers consistently claim that CALL changes, sometimes radically, the role of the teacher but does not eliminate the need for a teacher altogether" (Leigh, 2007,1). Instead of being directly involved in students' constructions of the language, the teacher interacts with students primarily to facilitate difficulties in using the

target language (grammar, vocabulary, etc.) to interact with the computer and/or other people (Sado, 2005). In other words, as Gruba mentions, here we need to refer to the teacher as a "mediator" between the computer and students throughout the learning process, serving the role of "keeping things running smoothly" (Gruba, 2004, p.637).

According to Jonita (2002), elimination of a strong teacher presence has been shown to lead to a larger quantity and better quality of communication, such as more fluency and more use of complex sentences. However, teacher presence is still very important to students when doing CALL activities. As the teacher guides them through the activities or conducts review sessions to reinforce what was learned, "most students report that they prefer to do work in a lab with a teacher's or tutor's presence rather than completely on their own" (Jonita, 2002 p. 174).

Students

According to Jonita (2002), students also need to adjust their expectations of their participation in the class in order to use CALL effectively. Here, learners must negotiate meaning and assimilate new information through interaction and collaboration with someone other than the teacher, be that person a classmate or someone outside of the classroom. Learners must also learn to interpret new information and experiences on their own terms. "However, because the use of technology redistributes teachers' and classmates' attentions, less-able or shy students can become more active participants in the class because class interaction is not limited to that directed by the teacher" (Jonita, 2002). This will raise their self-esteem and their knowledge will be improved.

However, despite all the advantages and disadvantages, most classrooms around the world, as well as in Armenia, are still four walls, desks and chairs, and a chalkboard. The

teacher and the textbook are relied upon as the primary inputs, models, and sources of interaction. Therefore, researchers like Hanson-Smith and Warschauer state (in Hanson-Smith 2007, p. 2) that even just a small use of technology in terms of Internet can be very useful. Through internet and on-line activities, the whole world can be brought into the classroom and students can interact over the Internet with other learners and native speakers. "The computer has the potential to allow individuals to use the learning styles they prefer, and to proceed through programmed learning at their own pace, with instant correction, explanation, and reinforcement. These advantages to technology are not sufficient to learn a language, however, and they are certainly not all the computer has to offer. In this case, the four walls of the classroom not only are enlarged but are put into the student's conscious control" (Hanson-Smith, 2007,p.2)

Nevertheless, it is worth emphasizing that the computer will not replace teachers because it cannot do most of the significant things teachers can: lesson planning, individual counseling, preparation and selection of materials, evaluation of process and product, and so on (Al-Jarf and Reima Sado, 2005).

2.4. The use of PowerPoint Presentations in the Classroom

CALL, as has already been mentioned in this paper, is a new area in teaching and learning language. However, several CALL tools have managed to become an inseparable part for both teachers and students: such as videos, CD-ROMs, PowerPoint, etc. The latter has become an accepted lecture aid in higher education and is frequently used to visually present the main points of classroom lectures.

Nowadays, PowerPoint is the best-known and most popular presentation software. It is included in the Microsoft Office Suite, which makes it widely available and cost effective

(Newby, Stepich, Lehman, Russell, 2000). Because of these and other advantages, PowerPoint presentations have become a popular way of presenting information to audiences of all kinds, and are rapidly becoming the standard for academic presentations.

Microsoft estimates that there are now over 30 million PowerPoint presentations a day and that the software is installed on 250 million computers worldwide (Amare, 2004). The wide acceptance of PowerPoint is due to its many advantages. Screens with great complexity and high visual appeal can be produced quickly and easily. Graphics, that have been scanned from traditional media or copied from the Internet, can be combined with text or other material. In the classroom setting, PowerPoint is often used as a lecture aid for visual support of oral presentations or lectures, and supporters like Tufte (2003), Ywaorski suggest it can help ensure that the main points of a lecture are clearly made. According to Yaworski (2001), PowerPoint helps speakers organize their thoughts and present them in a clear and concise manner while using multi-sensory tactics to hold audience attention.

However, here again there are disadvantages. Chapman (2003) suggests that PowerPoint is not engaging enough or interactive enough to be useful in education, although he presents no research to support this claim. Another major critic of presentation software is Tufte. Tufte (2003), in an article entitled "PowerPoint is Evil," says the slides may help speakers outline their speeches, but suggests there are many properties of PowerPoint that may actually reduce the understandability of the content. First, Tufte suggests that low resolution of many computer displays may distort tables and charts or make them illegible. Second, he suggests that the widespread use of bulleted lists in PowerPoint slides may suppress creative and critical thinking about lecture content since students may be led to think in the same order as the order in which major points are listed. Tufte also points out that students may be

forced to view bad typography and poor chart layout made by presenters who are poor

designers. Further, he maintains that some presenters select poorly designed templates that

distract audiences from the content of lectures. Another problem, according to Tufte is that

many presenters include too much text on each slide and include distracting animated, point-

to-point transitions. Tufte (2003) concludes that PowerPoint is more useful for guiding and

supporting a presenter than for helping students to understand and retain lecture material.

Tufte (2003) has strong opinions, but there is little research testing PowerPoint's effect

on learning processes such as classroom verbal interaction or on outcomes such as retention.

A few studies have compared effects of PowerPoint use to use of other, more traditional

presentation aids, typically overhead transparencies shown with an overhead projector.

However, these studies used student satisfaction or student attitudes, rather than student

outcomes such as verbal interaction or retention as dependent variables. *International

Journal of Technology in Teaching & Learning* 23 results of such studies typically show that

students tend to prefer lectures with PowerPoint to lectures with overhead transparencies. It

is understood that good teaching is not simply presenting content to students, but fosters

students' connections to content and promote students retention of facts and concepts (Mason

& Hlynka, 1998). Also critical is the effect of any teaching aid on verbal interaction between

students and the instructor, or students with other students. In fact, most instructors consider

verbal interaction highly desirable, and discussion is generally believed to enhance

understanding and retention (Diaz-Rico & Weed, 1995; Kryspin & Feldhusen, 1974;

Richards & Rodgers, 1986). Furthermore, it is believed that student talk is positively related

to student achievement. It may be that this is true because students in classrooms where there

is verbal interaction are more involved with all the learning activities than are students where discussion is limited (Flanders & Morine, 1973).

Maddux, Johnson, & Willis (2001) agree and argue that students learn best when they are actively constructing new knowledge. Maddux et al., (2001) define Type II technology applications as the applications that place the control with learners and involve them actively and intellectually. Presentation software can be considered a Type II technology application if its instructional use stimulates active intellectual involvement and provides opportunities for spontaneous and open-ended verbal interaction (Maddux et al., 2001).

Although there has been no empirical research on the effect of any presentation aid on classroom verbal interaction, according to Voss (2004) there are few but vivid disadvantages and problems that she had come across while conducting a survey to find students' attitude towards the PowerPoint presentations in their classroom. She states that according to her results of the survey students claim that they feel ignored in lecture halls when the instructor is focusing on the presentation and not paying attention to the class. Part of the problem, they have mentioned, is limited technology. If the faculty member does not have a remote mouse, he or she may not be able to leave the podium because of the need to advance to the next slide. This inability to move inhibits the teacher from being able to walk freely across the room and see when the students have questions. However, part of the problem is also the fact that faculty tends to focus on the technology and ignore the audience.

Both the students and Voss (2004) agree that PowerPoint should not be used simply to demonstrate that an instructor is using technology in his or her classroom. Students' comments show that instructors too often focus on the technical aspects of the presentation rather than on the information being presented. PowerPoint presentations that

are full of graphics and words flying across the screen without substantive content annoy students.

She goes on advising her readers to be attentive and instead of watching the presentation, watch the audience when a PowerPoint presentation is used. If the presenter is using animation (words flying onto the screen, for example) see whether the audience's heads are moving to follow the words or not. Perhaps the presenter is using the 'appear feature' in which the letters appear one at a time. Voss tries to find the answer to the question "What is the point of that: to keep the audience on edge?" She states that when this process is used infrequently, this can be an effective tool, but at times, she even claims that she have found herself wanting to leave a presentation because she was tired of waiting for the information to appear on the screen.

Another interesting result of her questionnaire is that the students have explained that they are insulted when the instructor does not recognize that they can read what is on the screen and proceeds to read the slides to the class. Reading PowerPoint slides verbatim is not limited to college classrooms; she has witnessed the same presentation style at many conferences. The presenter turns his or her back to the audience or stares at a monitor and never looks at the audience. *Is it because of poor presentation skills or they are uncomfortable with the topic*? Perhaps, but she is more keen on the idea that it is because of poor use of the technology.

In summary, still it needs to be researched deeply and provide with empirical evidence: whether PowerPoint improves student retention of facts and concepts presented in a lecture or whether PowerPoint stimulates, depresses, or has no effect on classroom verbal interaction and finally is there any effect of this tool on learners.

2.5. Affective Factors in Language Learning while Using Computer

People are fundamentally different from one another. Obvious areas of difference are ethnic origins, clothing, food, languages, and even ways of learning. On a broad level, these differences stem from the societies, cultures and families that individuals come from. On a more personal level, individuals are born with different genes and dispositions.

Thus, before conducting any research a teacher needs to do need analysis, which will help also to understand the learners' style of learning. Several researchers as Hanson Smith and Egbert (1999) mention that teachers need to do their best and match their students' learning experience to their learning styles or help them understand new ways of learning can ensure that the students have an opportunity to learn optimally even though they may learn differently.

A new way of learning a language is considered to be through computers. When computers were first introduced into the language classroom, they were expected to be flexible to cater: to multiple learning styles. Multimedia turned to be the best answer for teachers to address their students' many learning styles. Multimedia is defined as 'a program or information environment that uses computers to integrate text, graphics, images, video, and audio' (Shih And Alessi, 1996, p.204). Multimedia lessons appear to be able to address the modalities of a large number of learning styles simultaneously; in other words, a single multimedia program can cater to many learning styles simultaneously because the software teaches in auditory, visual and kinesthetic media. Other software tools, such as information organizers, help students to present ideas in different ways. In these instances, the computer supports students in learning about and practicing different ways of learning. Computers can also help teachers to record information about individual students and create challenging

learning activities that enhance and extend students' learning styles. For example, creating a PowerPoint presentation for the class requires the use of more than one form of intelligence or learning style. Many aspects of creating PowerPoint bring out students' potential in language learning environment, and the use of multimedia enhances this potential. Software that promotes creativity and lends itself to projects is readily available, but it is up to the teacher to design activities in which students learn not only from the work they engage in but also from their peers' learning styles in accomplishing certain tasks.

*Learner Autonomy***:** In striving to provide learners with opportunities to continue learning outside the classroom, many foreign language instructors are taking advantage of technology, in that the technology allows learners to work at their own pace, to have the freedom to choose their own materials and their own pedagogical path (Blin, 1999, p. 136).

So, in order to be autonomous the learner should be able to take charge over his own learning, he ideally needs to (Nicolaides 2003, p. 771):

- know how to define his aims;

- understand his role as a learner responsible to the process of search and acquisition of his own knowledge;

- be able to define ways to search for his knowledge developing abilities and skills to work independently in contexts different from the academic one;

- be able to detect his difficulties and look for solutions to be implemented and having greater control of his own learning;

- be able to self-evaluation, not only at the end, but during the learning process;

- develop the capacity to exercise autonomy as a learner in the opportunities offered by the context in a responsible way, and, therefore, become aware of his role as a modifier of his own social environment in which he is inserted in.

Fernandes (2005) highlights teacher autonomy stating that:

- teacher autonomy is different from the learner autonomy;

- teachers face more external pressures;

- being a teacher implies more exploration of choices and alternatives;

- teacher autonomy involves not only linguistic competence, but also a didactic and pedagogical one (Fernandes, 2005,p. 771).

For full autonomy, a learner must be able to control the content and the structure of the learning, including the time, the pace, the path to the goal, and the measurement of success.

Concluding the literature review of the present study, I tried to give support to my research questions, which are the following:

- Does computer assisted language learning have any effect on students' achievement of learning English?

- Does continuous practice with the computer motivate students to use computers for language learning beyond the classroom?

Chapter 3: Methodology

Introduction

The present study was designed to investigate whether and to what extent computer assisted language learning (CALL) motivates the learners and influences their achievement in English. The underlying assumption was that CALL, implemented through Internet, motivates and helps learners learn English better (Warschauer, 1996; Kang-Mi Lim & Hui Zhong Shen (2006). The research questions were as follows:

- *Does computer assisted language learning have any effect on students' achievement in English?*

- *Does the continuous practice with computer motivate students to use computer for language learning beyond the classroom?*

This chapter is composed of four sections. In the first section, the setting and participants of the study will be presented. In the second section, the materials and instruments used for the study will be presented. The third section will provide detailed information on data collection procedures. The final section will discuss the analyses of the data.

3.1. Setting and Participants

Participants of the study were 28 Experimental English Classes (EEC) students. It is important to note that these classes are different from traditional school or university setting because new methods are applied in teaching English, which motivates L2 learners who are interested in improving their language proficiency. The participants in the study were divided into two groups based on their placement test scores. There were 14 students: 6 girls and 8 boys (in the focus group) and 14 students: 7 boys and 7 girls (in the comparison group). The

proficiency level of the students was mid-intermediate and their age was from 12 to 14. They were all Armenians and their first language was Armenian. The participants of the focus group were not aware that they were going to use computer while learning English. This was new for them and a little bit challenging. However, after two sessions they got used to this new way of teaching.

3.2. Procedure

Classes took place twice (one hour per session) for 10 weeks in winter, 2009. Due to weather condition in the winter, the intensity of instruction doubled to decrease the length. That is, the classes were held twice but 2 hours per session. Therefore, the classes lasted only five weeks. In both groups, the same syllabus was used (the readings, writings and grammar). One hour of the class time was in the computer lab and one hour in the classroom. Both groups were given a pretest at the beginning (before the instruction) and a post test at the end of the term (after the instruction).

The classes were carried out in one of the AUA computer labs, which is a very comfortable place used by AUA students for their studies. There are 35 new computers with good internet connection. One computer is separated from the rest and serves for the teaching purposes of instructors and lab proctors. There is also a big screen, which has a projector and is connected to the instructor's computer.

Before beginning, I thought that I would need to explain how to use computer in general. Fortunately, it turned out that participants were very skillful in using a computer. Thus, I started implementing all the on line activities that were already prepared. All the activities were based on the syllabus for that level. In the first session, the participants were familiarized with the logistics of the computer lab. Interestingly enough, the second session

all the participants were in the lab before the class time and were enjoying computer games. The participants liked working with computers and learning English through online activities. To find out what they thought about the use of the computer during the lesson, the self-assessment sheets were distributed among the students. The assessment sheets contained three questions: a) what they learnt from that day's class, b) whether they still had any problems, c) what they liked and did not like (See appendix A). All their comments were used to evaluate the activities used during the class.

As a final project the participants in the focus group made Power Point presentations. For these presentations, the students were required to find information about a country of their choice via the internet and with the teacher's help; they had to prepare slides for PowerPoint presentations. Additionally, the focus group students were asked to write compositions *"Did computer and online activities help me to learn English?"*

The main sources that were used during these classes were *"www.learnenglish.org.uk"* (British Council) and "*www.ego4u.com* websites". The first website belongs to the British Council and the authors of this website are teachers and professionals in the field of English that are employed by the British Council and partner organizations. The second website has been established in 2000 and has 45.000 users per day. Heike Pahlow (translator and tutor with CTEFL certificate), Mario Müller (programmer) and Stefanie Czapla (illustrator) created this site. They have also a list of partners' sites (http://www.ego4u.com/en/team-up/partners).

3.3. Instrumentation

Two instruments were used for qualitative data collection: self-assessment and attitudinal surveys via compositions. For quantitative data collection, pre and posttests (see

Appendix B and C) were administered. The pre-test was developed for the purpose of this research. The content of the pre test was based on the materials they were supposed to have studied in the previous term. For the posttest, the EEC achievement test was used.

Both tests consisted of reading, writing and grammar sections. A sample of each is presented below:

Pre test: Pretest included three sections: Grammar contained 3 tasks, one of which has 10 items, whereas the next two tasks had 5 items each. Each item weighted 0.5 point.

Examples

Task 1.1 *Fill in the blankets with the right form of the verbs given in*:

   a.   While I was waiting for bus, I (meet)_____ an old friend.

Task 1.2 *Fill in the blanks with right preposition of time (for, since, in, from, later, ago) in each space*:

   a.   I met _____ the summer, three years_____.

Task 1.3 *Put a preposition of location (in, on, at near, opposite) in each space*:

   a.   Is there a theatre _____this town?

The Reading section had a text of 219 words and three tasks worth 14 points (1 point per item). The first task was to circle true (T) or false (F) for the statements about the reading. The second task was to look at the list of words from the reading and match each word with a given definition. One of the words in the list was extra to avoid guessing the last item. The third task required students to complete the sentences with the word from task 2 and put them in the correct form.

The last section was a composition that was worth 6 points for 6 complete sentences. Each correct sentence was given one point. It was based on a certain topic (*Imagine that you*

met a girl from China near Armenian restaurant. She speaks English, but she doesn't know anything about Armenian food. Tell her about the Armenian food that are tasty and why to taste) provided by the test developer.

Post test: The post test was the achievement test developed by EEC program. It had reading, grammar and writing sections.

The first section of the posttest was reading with two tasks. The first task had 3 items each with1 point, which required the students to *Read a letter and fill in the gaps with one of the topic sentences given. There was an extra sentence not needed here*. The second task had 5 items each with1 point. The task included a text followed by 5 questions requiring students to chose the right answer from the given four options (a, b, c, d) .

The second section also consisted of two tasks; the first task had 7 items, 1 point per each item.

Example:

Use the correct form of the verbs to complete the sentences:

1. If I find your key, I _____ (give) it you.

The second task had 5 items again one point per each item.

Example:

Put the following words in the correct order to make complete sentences:

1. Where year do want to spend your holiday this holiday?

The writing section had one task with 5 items each carrying 2 points. The instruction was as follows:

Luke's parents got divorced ten years ago. Luke has just met his father, Bill, for the first time in five years. In this conversation, he is telling his friend what his father said. Report it using the words given in the Word Box.

3.4. Analysis

In this study both quantitative and qualitative data were used to collect data. Quantitative data analyses were conducted by comparing the results self assessment. The items in the shelf assessment focused on a) *this is what I learnt* b) *I still have problems with* and finally, there were three choices in the form of smiles (, ,) that were symbolizing students' *likes, dislikes* and *don't knows* . Additionally, the Wilcoxon Signed Ranks Test was used to analyze the scores of both focus and comparison groups' tests through a pre-posttest quasi-experimental design. What relates to qualitative data, self-assessment and attitudinal surveys via compositions analyzed qualitatively and presented in the chapter results and discussions.

Chapter 4: Results and Discussions

Introduction

The current study was carried out to investigate whether CALL has any influence on Armenian EFL students' achievement and whether it motivates them to use computer for language learning beyond the classroom. Two groups of Experimental English Classes (EEC), a focus group and a comparison group were the participants of the study. The Data was collected through (1) the tests given to the students before and after the treatment, (2) students' self-assessment sheets and attitudinal surveys via their compositions. Both groups were instructed with the same syllabus, but the focus group received the same instruction via computers and on-line activities. This chapter presents the results of the data analysis both in qualitative and quantitative form.

4.1. Analysis of the Quantitative Data

Table 4.1 shows the results of the students' scores administered in both focus and comparison groups using Wilcoxon Signed Rank Test (Pallant, 2007).

Table 4.1 Test Statistics

|	Post-focus – Pre-focus	Post-comparison – Pre-comparison	Pre-comparison – Pre-focus	Post-comparison– Post-focus	Pre-comparison – Post-focus	Post-comparison – Pre-focus
Z	-2.754	-.386	-1.818	-.420	-.175	-2.273
Sig. (2-tailed)	.006	.699	.069	.674	.861	.023

Table 4.1 provides the statistical analysis of the pair-test scores. According to Wilcoxon Signed Rank Test, if the significance level is equal to or less than 0.05, you can conclude that the difference between the two sets of scores is statistically significant. In the table, the Z score is not presented as a test statistic for a significance test, but rather as a numerical guide to finding subsets of data, thus only significance value is described. In this case, the significance value (p value) of the treatment is more than .05 except in the post-comparison-pre-focus case, which in its turn means that scores are not significantly different. Therefore, we can conclude that there is no significant difference between the 'traditional' way of teaching and CALL.

## 4.2. The Use of Self Assessment Sheets

During the classes, the students of the focus group expressed their opinions after each class by filling in the self-assessment sheets. The students expressed their attitude (likes and dislikes) towards the ways the activities were chosen and implemented. Figure 4.1 provides a clearer picture of their attitude towards the implementation of CALL through the pie charts.
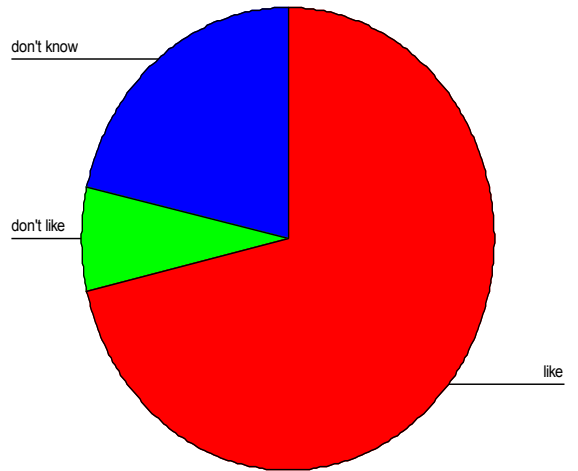
Figure 4.1

DAY1

don't know

like

DAY5

like

DAY7

don't know

don't like

like
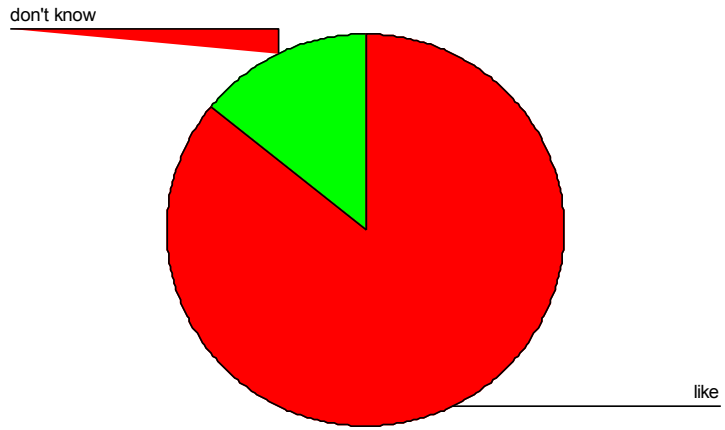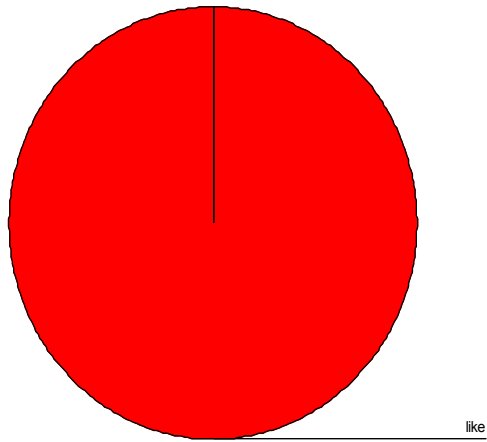
These three pie charts above were chosen to show the general picture of students'

attitude towards the CALL through self-assessment items (in the form of smiles). These

charts illustrate what kind of attitude the students had towards the implementation of

computers and classes conducted with the help of on-line activities. In Day 1, 85% of

students had circled the option 'like' in their answer sheets, in Day 5 as well as in the rest of

the days except the Day 7 they provided the similar results, i.e. participants circled the 'like'

option. The results of the self assessment on Day 7 is very interesting in the outcomes of the

answers, as they differ greatly from each other, 20% circled "like", 10% "don't like" while

the rest "like" options. The students explained their choices of the following options pointing

out the negative feelings when they heard about the completion of the program with the use

of CALL.

4.3. The Use of PowerPoint Presentations

The responses to the implementation of PowerPoint Presentations showed the

students' attitude towards the PowerPoint Presentations used during the last few days of

classes, where their peers graded them and gave certain type of feedback. These

presentations served as means to show how the students had become competent with the

computers and share their knowledge and skills through the slides prepared by them

independently.

To make the picture clearer, the following are their comments:

Student 1: "I liked presentations about famous people and countries, they were really

interesting".

Student 2: "Through presentations we not only learnt information about countries but also how to use the program Microsoft PowerPoint".

Student 3: "I liked that for the presentations we chose the information from the Google and the pictures that we wanted to put on the slides".

4.4. The Use of Attitudinal Surveys via Compositions

In order to investigate the students' attitude towards the use of CALL in their classes, they were asked to write a composition with the following title *"Did computers and on-line activities help me to learn English"*.

Analyzing the content of the compositions, it became clear that all the students had very positive attitude towards the use of CALL while studying English. Moreover, they are keener on this way of teaching. Some of their comments follow:

Student 1: "I think it helps us to learn not only English, but computer too. We learn English with interesting games and activities since there are a lots of software and games in computers, which are available only in English. So one, using computer should interact with English with no choice. And it helps and push users of computers to learn English". *["I think it helps us to learn not only English, but computer too. We learn English with interesting games and activities since there are a lot of software and games in computers, which are available only in English. Thus, a person, using computer should interact in English indirectly. And it helps and pushes users of computers to learn English"] (brackets mine).*

Student 2: "Computer and online activities help me understand grammar better. I understand English grammar, I know grammar, but computer help me understand all". *[Computer and online activities helped me understand grammar better. I understand English grammar, I know grammar, but computer helped me understand everything better]*

Student 3: "….if I can learn English much in class, I can learn English more with internet and on-line ,too. I am very sad that now we haven't classes with internet and on-line. It was interesting and pleasant". *[…if I learn English during the class, I learn more with internet and on-line activities. I am very sad that now we don't have classes with internet and online activities. It was interesting and pleasant]*

Student 4: "Yes, computer and on-line activities help me to learn English because computer already English class". *[Yes, computer and on-line activities helped me to learn English because computer is already an English class]*

Note: All the changes in the brackets are mine.

4.5. Research Findings

Considering the results, it might be claimed that there is no significant difference between the two groups, which participated in the research.

Despite the fact that there was no significant difference between CALL and traditional way of teaching, the students' positive feedback through attitudinal surveys via compositions can be considered evidence for their enhanced motivation of using CALL during their classes. The overall results from the self-assessment sheets and compositions indicated that students in the CALL based class enjoyed their learning. Moreover, on-line activities became an important tool for some learners to turn into learners that are more autonomous: i.e. to use these on-line sites beyond the classroom.

In the present study, students using CALL reflected on the numerous benefits they experienced by participating in the use of technology in language learning. They reported that the introduction of technology enhanced opportunities for exposure to, and interaction

with a variety of learning materials, which were considered interesting and enjoyable, among which was the PowerPoint Presentations.

These findings are similar to the findings of other studies relating to certain aspects of CALL or technology-enhanced language learning. The use of computers in language teaching appears to increase interaction with a variety of interesting, enjoyable and useful materials and tasks, which sustains and enhances the students' interest and increases their motivation (Ayres, 2002; Muenier, 1999; Adair-Hauck, Laurel, Willingham-McLain and Youngs, 1999; Warschauer, 1996; Strambi, 2001; Echavez-Solano, 2003; Holmes, 1998; Kang-Mi Lim & Hui Zhong Shen (2006). In the Kang-Mi Lim & Hui Zhong Shen findings, it is stated that students in the CALL based English class reflected on the numerous benefits they experienced by participating in the use of technology in language learning. They reported that the introduction of technology enhanced opportunities for exposure to, and interaction with a variety of learning materials, which were considered interesting and enjoyable. There were four factors extracted from the Survey, which described the classroom environments, one of which and the most evident one was *interest*. The students in the CALL based English class showed significantly higher interest in their learning in the class than the students in the traditional English class. In other words, students in CALL based English class showed that the materials were presented in an interesting way and the class was well organized. These aspects of the class were considered interesting and worth recommending to their fellow students.

In this vein, Warchauer (1996) explains, participants in the CALL based class often observe that they experience enthusiasm during the whole period of working with computers. Indeed, in the present study, 14 students expressed interest and explained this in terms of not

having experienced CALL based classes at their schools. Therefore, the impact of computers on learning English as a foreign language in the Armenian settings needs to be observed over a longer time period.

In conclusion, I would like to state that the motivation and interest in the classroom environment was reported to be the main factors between the traditional and the CALL based English class, which is evident in the focus group students' compositions and self-assessment sheets. Therefore, an important point of this research is the students' motivation and interest of using CALL in their classroom settings.

Chapter 5: Conclusions, Implications, and Suggestions for Further Research

Introduction

The results of the current study revealed that there were no significant difference between traditional way of teaching and CALL. There could be several reasons for the outcome. As Joy and Garcia (2000) state, many non-significant difference findings result from uncontrolled variables, as perfect controls over all the factors that may influence a study's results are sometimes difficult in educational settings. Uncontrolled variables in the present study could be the number of participants and teacher variable between the two groups, students' familiarity with technology, duration of treatment, and finally design and development of CALL.

However, the aim of this study from the beginning was not to convince that CALL is better than the traditional method of teaching, but to suggest using CALL as a supplementary technique of teaching English. This finding, however, is very significant, as no such research has previously been carried out in Armenia. Therefore, this study may provide a basis for further research in this area.

5.1. Limitations of the Study

There are some limitations for this study that should be mentioned. The first limitation that is worth mentioning was the limited number of the participants. This number was less than the threshold level of 30. The second limitation might be the teacher variable. Different teachers taught the two groups of the participants in the focus and comparison groups where the research was done. The variations between the teachers and limited number

of the participants could have influenced the results of the current research. Finally, it might be the duration of the treatment. As mentioned in the previous chapters, the research was done only during five weeks, 2 hours per session.

The conclusions were made based on pre and posttest, students' attitudinal surveys via compositions and self-assessment sheets. However, to have results that are more valid it will be advisable to conduct interviews, questionnaires and spend more time using CALL in EFL classroom. As 5 weeks is not enough to come to any kind of certain conclusion, and the instruments used were not enough to collect data that are more valid and were not enough to bring to any kind of generalizations.

5.2. Applications and Implications

The study implies that there was no statistically significant difference between the traditional way of teaching and CALL. However, the analysis of focus group's compositions and self-assessment illustrated that students liked working with computer and using it as a supplementary way of teaching. Thus, those universities or schools that have computer facilities may apply CALL as a supplementary way of teaching English. Moreover, taking into consideration the fact that current attempts (like the projects in Quantium College) of using CALL in the educational systems will result in changes in the methodology in Armenian EFL settings. Therefore, demands for supplementary ways of teaching English in this case through CALL will increase.

5.3. Recommendations for Further Research

Taking into consideration the above-mentioned limitations it would be indispensable to carry out further research on the area of CALL. Moreover, it will be better even to replicate this study taking into consideration the recommendations that are provided below.

1. to have one teacher in both focus and comparison groups

2. to use multiple instruments in collecting data

3. to do a longitudinal research

4. to have more participants involved in the research

5. to have better trained teachers for implementing CALL

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APPENDICES

Appendix A: Self Assessment Sheet

Self Assessment Sheet

✓ **This is what I learnt today:**

❖ _____

❖ _____

❖ _____

❖ _____

❖ _____

✓ **I still have problems with:**

❖ _____

❖ _____

❖ _____

Today's lesson made me feel (circle one) :

Appendix B: Pre-test

Pre-test

American University of Armenia
Date01/13/09
Name_____

Grammar Section
1 *Fill in the blankets with the right form of the verbs given in*:

   a. While I was waiting for the bus, I (meet) _____ an old friend.

   b. (you eat)_____ Japanese food?

   c. I (not see) _____Peter since Monday.

   d. I am afraid we (not like) _____the film. It wasn't very funny.

   e. What time (you go) _____ to school every day.

   f. I feel really awful. I think I (catch) _____ a cold.

   g. In general she (not like) _____plain colors.

   h. When he entered, I (wash) _____ the dishes.

   i. What (you do) _____every day when you were on holiday?

   j. Last night I (get) _____ home at 6.00 and (start)_____my homework

2 *Fill in the blanks with right preposition of time (for, since, from, in, later, ago) in each space*:

   a. _____10.00 to 11.00 there's a drama lesson.

   b. I met Helen _____the summer, three years_____.

   c. I can't talk to you now, but I'll meet you _____.

   d. I've lived here_____ January, and I'll be here_____ two years more.

   e. I haven't had any food_____6.00 this morning and I'm hungry!

2 *Put a preposition of location (in, on, at near, opposite) in each space*:

   a. Is there a theatre_____ this town?

   b. There's a church on the other side of the road exactly_____ the school.

   c. Excuse me; is there a bus-stop_____ here?

   d. The cinema is _____the right_____ the end of the street.

   e. I usually arrive _____school before 8.00.

Food That Makes You Good

Reading section

1. Read the text and answer the questions.

Food is life; it gives us the nourishment we need to stay alive and be healthy. Usually, we eat because we are hungry or need energy. Brian Wansink, a professor at the University of Illinois, says we also eat certain foods because they make us feel good, and remind us of happy memories. Wansink calls this kind of food comfort food. For some people, ice cream is a comfort food. For others, a bowl of noodle soup makes them feel good.

How does a food become comfort food? Professor Wansink believes that we connect food with important times, feelings, and people in our lives. "When I was a child, my mother made a delicious soup; I loved it. Now, I often eat this soup when I am tired or worried, and it helps me feel better," says one of Wansink's coworkers.

Do men and women choose different comfort foods? Wansink's research at the University of Illinois says 'yes'. In his study, the favorite comfort food for both men and women was ice cream. After this, men usually preferred hot, savory foods like soup or noodles. Women liked sweet things such as chocolate and cookies. Men and women like to eat comfort foods when they are happy, but women eat these foods more when they are sad or worried.

Not all comfort food is junk food. About 40 percent of the comfort foods in Wansink's study were healthy main dishes or soups and vegetables. It shows, says Wansink, that a comfort food can taste good and be good for you.

1. **Decide if the following statements about the reading are true (T) or false (F).**

1. We eat certain foods because they make us feel good. T F	
2. We do not connect food with feelings. T F	
3. Men and women choose different comfort foods. T F	
4. Almost all comfort foods are junk foods. T F	

2. **Look at the list of words from the reading. Match each word with a definition on the right.**

1. nourishment   _____   a. testing very good

2. connect   _____   b. healthy foods that help us live

3. delicious   _____   and grow

4. choose   _____   c. to select one thing with some

5. prefer   _____   thing else

d. to link one thing with something else

3. **Complete the sentences below with a word from 2. Be sure to use the correct form of the word.**

1. I always _____ eating ice cream with my childhood vacations. We ate it almost

   every day we were on vacation.

2. Lindsay baked a _____cake for the party.

3. I can't _____ between this cookie and the brownie. They both look really

   good.

4. You must eat your vegetables! You need the _____. You are too thin.

5. My brother _____chicken to red meat.

Writing section

Imagine that you met a girl from China near Armenian restaurant. She speaks English, but she doesn't know anything about Armenian food. Tell her about the Armenian food that are tasty and why to taste. Write at least six complete sentences.

._____

_____

_____

_____

_____

_____

_____

_____

Appendix C: Post-test

Post-test

Name_____

1. Read the letter and fill in gaps with the topic sentences A to D. Write the appropriate letter in the space provided. There is an extra sentence, which you do not need to use.

    A. Don't worry about catching the last bus home.

    B. You are going to love our new home.

    C. I guess you'll be coming by bus, so here are the directions from the bus terminal.

    D. WE decided to hold the party on a Saturday so that everybody can make it.

Dear Maria

Hi! How are you? I am writing to invite you to our housewarming party on Saturday the 25th of June.

1._____Most of our friends from our old neighborhood are coming. We're going to have a barbeque, you know, burgers, chicken, salads, that sort of things. I'm sure it'll be great fun.

2._____As soon as you come out of the terminal, go straight down Fulton Road until you reach the Forrester Library. Then turn left into Harrow Road. Our house is the third on the right, the one with the red roof. You can't miss it.

3._____We'd be more than happy to put you up for the night. Anyway, I hope you can come. It would be lovely to see you again.

Lots of love,

Ann

2. Read the text and answer the question choosing the right answer.

September is the ninth month of the year. However, the word *September* comes from the Latin word *septem*, which means 'seven.' This is because long ago a different calendar was used in which September was indeed the seventh month. When Julius Caesar, leader of Rome, changed the calendar, he made September the ninth month.

September is a time of change. With autumn and winter approaching, temperatures usually begin to drop somewhat. It is also a productive time of the year since this is when farmers ***harvest*** some of their vegetables and fruit, especially apples, which have finished their growing season.

September has thirty days. The ***major*** US holiday in September is Labour Day. This holiday, which comes on the first Monday of the month, is in honor of all people who work. September the seventh is Brazil's Independence Day and Chile's is the eighteenth. Armenia's Independence Day is September the twenty-first.

1. The main idea for paragraph 1 (lines 1-4) is
   a. the name for September means 'seven' because it is the seventh month of the year.
   b. the word September refers to the month's place in the old calendar
   c. the Latin word 'septem' is translated into English as 'seven'
   d. Julius Caesar, leader of Rome, made the seventh month of the year longer
2. The word *harvest* in the second paragraph (line 6) means
   a. clean
   b. grow
   c. collect
   d. sell

3. The word *major* in the second paragraph (line 8) means

    a. free

    b. important

    c. proper

    d. necessary

4. September 18 is an important day in

    a. Brazil

    b. Chile

    c. the US

    d. Armenia

5. According to paragraph 3 (lines 8-11)

    a. Labour Day is celebrated on the first Monday of every month

    b. Brazil and Chile celebrate Independence Day on the same day

    c. Brazil and Armenia celebrate some of their holidays in September

    d. Chile became independent before Brazil

3. Use the correct form of the verbs to complete the conditional sentences.

1. If I find your key, I _____ (give) it you.

2. If the weather is bad, we _____ (not go) swimming.

3. If you see Joe, _____ (tell) him to call me.

4. If you _____ (mix) blue with yellow, you'll get green.

5. If you don't study, you _____ (not pass) your exams.

6. The plate is hot. If you touch it, you _____ (burn) yourself.

7. If Tom _____ (work) hard, he will be successful.

4. Put the following words in the correct order to make up complete sentence.

1. Where year do want to spend your you this holiday?

2. I will you as reach as soon I Prague call

3. Uncle all flew way from the Australia Tom

4. uncomfortable feel Carol used with to people

5. hospital his became to go more a responsible when person mother had to Brian

5. Luke's parents got divorced ten years ago. Luke has just met his father, Bill, for the first time in five years. In this conversation, he is telling his friend what his father said. Report it.

What Bill said.	
1. 'Are you living on your own?'	4. 'Don't take any drugs.'
2. 'Please get enough sleep.'	5. 'Why did Paul leave the flat?'
3. 'You should get some qualifications.'	6. 'Where do you work?'
7'Please give me your new address in New York.'	

Example:

Shelly: ***What did he say?***

Luke: 1. (ask) ***He asked me if I was living on my own***.

Shelly: None of his business! What else?

Luke: 2. (advice)

_____

Shelly: What does he think you've been doing for five years? What about college?

Luke: 3. (tell)

_____

Shelly: Did he get any himself? Anything else?

Luke: 4. (warn)

_____

Shelly: I suppose that's sensible. What about Paul?

Luke: 5. (ask)

_____

Shelly: Did you talk about work?

Luke: 6. (ask)

_____

Shelly: So you told him about the job in Armenia?

Luke: 7. (persuade)_____