PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA

Ministry of Higher Education and Scientific Research

University Centre of Ain Temouchent

Institute of Letters and Foreign Languages

Department of English Language and Letters

Investigating the Effects of Using C.A.L.L Technology in the Algerian E.F.L Classroom

The Case of First-Year EFL Students at the University Centre of Belhadj Bouchaib, Ain Temouchent

An Extended Essay Submitted to the Department of English as a Partial Fulfilment for the Requirements for Master Degree in Advanced Studies in Contemporary Linguistics

Submitted by: **Supervised by:**

Mr. BENRAMDANE Abdelatif   **Mr. TAKROUMBALT Med Ameziane**

Board of Examiners

- **President: Ms. FEHAIMA Amaria**   (MAA)   CUBBAT
- **Supervisor: Mr. TAKROUMBALT Med Ameziane**   (MAB)   CUBBAT
- **Examiner: Dr. HAMZAOUI Chahrazed**   (MCB)   CUBBAT

Academic Year: 2017-2018

Dedications

I write this to thank

    Allah for giving me strength

        My family for showering me in love and care

           My teachers for giving me knowledge and wisdom

           My friends for supporting me

           My Supervisor for his guidance

                        Thank you very much

Acknowledgments

I would like to express my deepest appreciation to my supervisor mister Takroumbalt for his guidance and his precious advice.

Special thanks go to the board of examiners Ms FEHAIMA Ammaria and Dr HAMZAOUI Chahrazed who accepted to read and evaluate this work.

Special thanks go also to all the teachers of the department of letters and English language in the university centre of Belhadj Bouchaib of Ain Temouchent.

Abstract

In the current era, technology has spread and affected almost all aspects of life, one of which is education. The applications of technology in education gave birth to Computer Assisted Language Learning. This new field showed great promise which led to the rapid growth and development of several software and tools which are used in education around the world. Unfortunately, in Algeria, teaching still depends on traditional classroom teaching, and even the use of technology in teaching or learning is limited to simple videos or PowerPoint. This pushed the researcher to try and find the possible effects of CALL software in an attempt to enhance language learning. The study aims to investigate the effects of using CALL on the level of knowledge and language skills as well as motivation and attitude. In an effort to answer these questions, a quasi-experiment was conducted in the department of English language in Belhadj Bouchaib university centre, where first year students answered tests before and after introducing and using the software for a fortnight, in an effort to answer the first question. The second question was addressed by means of a case study in which questionnaires were administered. The data gathered was analysed quantitatively. Finally the findings obtained from the data confirmed the aid of the software in increasing the students' knowledge, improving their four language skills and help in motivating the students.

Table of Contents

Chapter One: Literature Review: An Overview of C.A.L.L

List of tables

List of Figures

List of Bar Graphs:

List of Pie Charts:

List of Acronyms

C.A.L.L: Computer Assisted Language Learning.

C.M.C: Computer Mediated Communication.

E.F.L: English as a Foreign Language.

E.S.L: English as a Second Language.

General Introduction

Education is a very important component in building a successful generation and so it is always under constant change and evolution to improve it, which led to incorporating new techniques and methods to the field. Technology is always evolving and has a tight relationship with education. Since the invention of computers in the 1940's, it has always been considered as a part of education.

Computer Assisted Language Learning is one of the fruits born from the merging of technology and Education. This fruit provides both teachers and students with authentic language samples to use and implement through different modes of use that evolved from CD and Diskettes to via internet now.

In 2003, Algerian Ministry of Education has implemented a new Teaching methodology called Competency Based Approach which is a learner centered approach that focuses on the competency of the student and his active engagement in the learning process.

This lead to encouraging teachers to integrate technology in their lesson planning, but the reality is that it could only be implemented in a limited aspect and only at the higher levels of education and not in the other levels because of various barriers and limitations, especially when it comes to teaching Languages in general and English as a Foreign language specifically.

This research aims to explore the possible effects of implementing CALL in Algerian EFL classroom and how it influences the students' knowledge and four language skills and to investigate the effects of using CALL on learners' motivation and susceptibility to improve their autonomy.

To investigate this research work, the following questions are worth asking:

- **RQ1:** What are the possible effects of using CALL on the participants' knowledge and four skills?
- **RQ2:** What are the possible effects of using CALL on the participants' attitude and motivation?

Accordingly, the following hypotheses were postulated:

- **Hyp1:** The use of CALL may have positive effects in improving the participants' knowledge and language skills.
- **Hyp2**: The use of CALL could have positive impact on the participants' attitude and leads to increasing their motivation.

In order to carry out this study, the researcher conducted a quasi-experiment in order to answer the first question, in which a pretest was administered to measure the knowledge of the participants concerning grammar at the advance level, the experimental manipulation in the form of using an Oxford grammar teaching software was performed by the participants for two weeks, and then the posttest was administered in order to compare the results of both test. For the second question, a questionnaire was administered to the first year EFL students of the department of English at Belhadj Bouchaib University Center of Ain Temouchent to collect the necessary information about their attitudes and motivation. The data was quantitatively analyzed.

This work consists of three chapters. The first chapter discuss the previous literature written about CALL, its history and development and the effects of using it in language teaching and learning. The second chapter is devoted to the methodology and research designs that the researcher followed, the instruments used to gather data, the sample under study as well as the analysis of the data gathered. The third chapter will give a deep discussion of the findings, demonstrate the advantages and disadvantages of CALL as well as the limitations of the study and end by recommendations for possible future research.

CHAPTER ONE

Literature Review: An Overview of

CALL

Chapter One: Literature Review: An Overview of CALL

1.1 Introduction

Technology is playing a big part of lives, both personal and professional. It is noticed that the practicality and easiness of use that such tools bring have spread to the field of education which gave birth to Computer Assisted Language Learning (CALL). The applications of this mixture between technology and education are unlimited, as it brings great benefits to both the learner and teacher. The easiness of conducting a lesson for teachers as well as having a private tutor at your disposal as a learner using technology, has prompted the inquisitive minds to further research such applications to a larger scopes, such as the benefits it can bring to increasing the motivation as well as knowledge of the learner/student.

This chapter is dedicated to discuss the impact of using technology in education and to introduce the field born from this which is Computer Assisted Language Learning (C.A.L.L). The first parts of this chapter will be about the history and development of this field as well as the different types which immerged and their key characteristics. The latter parts will be about the effects of using CALL on the four language skills (Listening, Speaking, Reading and Writing), as well as the attitudes of teachers and students toward CALL in Algeria and the effects of CALL on motivation which will be implicitly discussed along the chapter.

1.2 The Importance of Using Technology in Education

Nowadays, teachers and learners are using computers, internet and other technological tools in their studies. This is attributed to the increasing popularity and widespread of these easy to use banks of information. "Teaching/learning technologies have increased in popularity during last 20 to 30 years, it is one of the most dynamic areas in the education system, especially second language learning with a variety of tool" (Reinders, & Thomas,

2012). With the constant development of computers and its softwares, especially the one designed to aid in the teaching and learning process, technology became almost indispensable for education. "Today the number of teachers and students using computers and the Internet to teach/learn a second language has increased due to the technology advances" (Han, 2008). Its importance in the teaching/learning process goes beyond just providing just a vast sea of information, "Computers are tools used to let students experience a second language and culture like they could not experience firsthand before; computers allow students to access a wide range of material in the target language such as videos, podcasts, blogs, and they provide more opportunities to interact with native speakers" (Dickinson, Brew, & Meurers, 2012).

"Technology used to teach/learn has the power of improving students' learning and students' motivation while offering students the opportunity for individuality of technology access and interaction in order to be able to communicate ideas using the new L2 vocabulary/grammar learned" (Díaz,Jansson,& Martínez, 2011). From the previous contributions discussed by these scholars, Technology has many other effects on the teaching/ learning process, as it can help motivate the learners and at the same time give them the opportunity to self learn in a controlled environment which later can develop into autonomous learning, a goal which is highly encouraged by many scholars and educators.

1.3 Definition of Computer Assisted Language Learning (C.A.L.L)

Since the emergence of computers at the 19th century, scholars have tried to incorporate its uses in teaching and learning with different methods, C.A.L.L is the child born from the marriage of teaching methodologies and computer sciences. It is defined as "the search for and study of applications of the computer in language teaching and learning." (Levy,1997: 1), although this definition is old but it still represent the fundamentals of this field of studies, so that even if the computer evolved from its traditional concept of a desk size

to a portable pocket size, and the teaching methods evolved from the traditional methods to the newer one. This definition of Levy still is taken into consideration. Some may find the definition vague in the sense of what are these applications, but Levy conceptualized the field of C.A.L.L by determining the role of computer in language teaching or learning as either a "tool" or "tutor". These roles can be distinguished by the function of computer in the teaching process, such as an online grammar exercise or an automated writing evaluator program here they play the role of a tutor, while a Google search or using a word processor is playing the role of a tool since it doesn't have any apparent teaching function. These concepts are the foundations for the different types of C.A.L.L that emerged which would be discussed in point 5, and the history of development which is discussed next.

1.4   The History and Development of C.A.L.L

According to Warschauer, M. (1996), the development of C.A.L.L can be divided into three main stages: Behavioristic CALL, Communicative CALL, and the most recent development in two sub stages Integrative CALL (Multimedia CDROM), and Integrative CALL (internet). He also emphasized that even with the emergence of a new trend, the old one is not neglected but rather included in the framework of the newer ones, so that it is a continuation of development rather than replacement of a new trend by another.

The historical development of CALL is summarized in the tables which can be seen in Appendix A.

The history of C.A.L.L can be traced to the beginning of 1960s in the form of basic drill and practice materials mainly based on the PLATO system from the University of Illinois. The utility and popularity of this new discipline was insignificant until the early 1980s with the spread of microcomputers in educational settings. These first steps taken by

teacher-developers who created the programs allowed the research to reach the developing of interactive laser disks which later inspired the innovation of multimedia. During this period 1980-90s the computer was used more as a tool, especially with the integration of word processors in writing classes, but with the invention of World Wide Web, there was a shift from developing programs with the computer as a tool to using it as a tutor with the development of computer mediated communication CMC. This new CMC activities had a great influence on the motivation of students especially the shy ones where it provided a safe environment to interact with their fellow students in a way not possible before. At the end of 20th and the beginning of the 21th century, C.A.L.L became more popular with the use of CD-ROM of interactive programs to teach language, and later with the spread of the internet, the online lessons that function as a tutor became popular with the instructional videos of YouTube and the CMC through video chat programs such as Skype, and these developments are still ongoing with the progress of artificial intelligence where you can almost have a normal conversation with your computer. (Hubbard, 2016)

1.5 Types of C.A.L.L

This section gives a brief overview of the different types of CALL and how they have been used for the purpose of teaching and learning language.

1.5.1 Computer as a Tool

This is the type that uses the computer as a tool either for easier communication or simply to save time, there are many instances of this use such as:

1.5.1.1 Practice and Drill

One of the oldest and first applications of computers in the domain of teaching, it relies on the behaviorism learning theory and function as a mean to review knowledge or assist the learner to master spate skills. The practice and drill program challenge the leaner by

recording the previous results and time and add to the difficulty by asking harder questions or limit the time to shorter period to enhance his speed. The limitations of this type are the lack of interaction and restriction to only one skill. There are several types of drill and practice activities (exercises) such as Paired Associate (Matching); Sentence Completion; Multiple Choice; Part Identification; True-False; and Short-Answer questions.

1.5.1.2   Word Processors

One of the most common and easy tools to use by either teachers or learners. It is used for preparing handouts, work sheets or simple writing assignments. The famous program used is the Microsoft Word.

1.5.1.3   Spelling and Grammar Checkers

Some of the high quality word processors have them included in the package, but there are separate programs that have these functions of checking and notifying the user about mistakes in their writing. These tools may be helpful but it is limited in their response and only recommended for native speakers or proficient user in that language and it is not recommended for ESL/EFL learners since the corrections may be confusing.

1.5.1.4   Concordancers

Concordancing is an alphabetical list of words. It displays, in context, all occurrences of words, phrases, etc. from a database of text. Teachers and learners can use concordancing software to search large databases to find all the uses of a particular word. Without proper training it might be confusing for ESL/EFL beginners who are still at the beginner stage, but once they progress in the level of mastery of the language. This tool provides a very good chance to make their language get closer to the native like speakers. The best concordancer for ELT teachers and students is Oxford Micro Concord. The software includes a total of about 1,000,000 words from British newspapers.

1.5.2   **Computer used as a Tutor**

this type of use is not limited to only one of the types mentioned above but combine some of them in the form of a compete lesson as if taught by a teacher himself. The program consists of the following stages: Introduction stage (stating aims and background information), Presentation of the content of the lesson, Exercises/Testing in order to reinforce what is learnt or see the level of intake, and finally giving the feedback.

Examples of C.A.L.L tutorial programs are:

1.5.2.1   **Grammar**

Longman Grammar Software; Grammar Expert Plus; Tense Buster (Clarity Software); Grammar Mastery (ALA); Grammar Rom (Addison Wesley Longman); Grammar 3D: Contextualized Practice for Learners of English (Heinle & Heinle).

1.5.2.2   **Reading**

Read It! Study Skills (Clarity Language Consultants) (EAP reading); RocketReader (1998) (a speed reading program); ReadFlex (Speed Reading); Reading for English (Athelstan) (Reading Comprehension); SEEN: Tutorials for Critical Reading (KenCD Software) (tutorials designed to develop analytical thinking and critical reading skills); Accelerated Reader (Advantage Learning Systems).

1.5.2.3   **Writing**

Paragraph Punch (a writing tutor for effective paragraph); WriteExpress Easy Letters (effective business letters); Power Editing (an interactive tutorial on how to edit and revise sentences); Report Writer for Science and Engineering Reports (Clarity Language Consultants) (EFL/ESL report science and engineer writing).

1.5.2.4   Speaking, Pronunciation & Listening

Learn to Speak (The Learning Company); English Pronunciation (1997-98) (Okanagan University College); Dragon, Naturally Speaking (A voice recognition program); See It, Hear It, Say It! (Courseware Publishing International); Accent Improvement (SpeakWare); Real English (Wiser Software).

1.5.2.5   Integrated Skills / Courseware

Ellis (CALI), Dynamic English (DynEd); English Discoveries (Berlitz); English Language Development (Jostens); Rosetta Stone (Fairfield Language Technologies); Planet English (Unisearch Ltd and the University of New South Wales); Issues in English (Protea Software); Active English (Courseware Publishing International).

1.5.3   Internet Application

With the growth and popularity of the World Wide Web, it gave a new life to C.A.L.L, by connecting computers and the internet and incorporating interactive multimedia, and later the internet became one of the most popular mediums for CALL because it allows for world-wide distance education. The following are internet applications that ELT teachers can use for language teaching:

1.5.3.1   Electronic mail (e-mail)

Computer-mediated communication makes it easy for EFL learners to have direct authentic communication with the teacher, other learners or interested people around the world by using e-mail. E-mail is a good method for teaching interactive writing because it provides interaction with native speakers through pen-pal correspondence, as long as they use correct language and not the net language.

1.5.3.2 World **Wide Web**

The WWW provides a rich variety of information from all across the world and from different domains; it provides a source of "authentic materials" for language teaching and learning that can be in the form of texts, recordings of audio or video files.

1.5.3.3 **Voice Chat and Video chat**

The evolution of Computer Mediated Communication CMC with the help of the internet allows exchanges in real time by means of text messages or video chat where face to face conversations are realized. It provides a strong motivation for learner's interaction with speakers of native language which can improve his mastery of the language.

1.6   Effects of using C.A.L.L on the 4 skills

Computers have unique multifunctional and multiuse aspects, which bring C.A.L.L several levels of intricacy and applications in L2 learning (Levy, 2009), which when applied in the learning settings can bring a few benefits such as interactive activities and multimedia applications which are engaging (Genc, 2012). These benefits can be observed at the level of all 4 skills.

1.6.1   Reading Skill

According to Levy's research (2009), technology can assist learners by providing authentic reading materials and give the opportunity to look up concepts and other information to strengthen the learning activity while surfing the internet due to the vocabulary building, text reading and comprehension. Chun (2001) concluded that tools such as online dictionaries mono or bilingual and audio narration were very helpful in improving the learner's reading skill.

1.6.2   Listening Skill

With the improvement of technology lately, C.A.L.L has now a wide range of files not only limited to audio but also video. These files can be accessed at anytime from any place by the teachers or learners, and gives them the total control of their learning where they can play, pause, stop and slow down or rewind a part so that they can learn the pronunciation and intonation of the native speaker of that language (Levy, 2009). Research conducted by Sato found that listening to CALL audio software enabled faster vocabulary recall by the second language students (Sato, Matsunuma, & Suzuki, 2013). On the other hand Verdugo's and Belmonte's study reported that by using target language digital stories, students were able to improve their L2 listening comprehension skills at the level studied (Verdugo& Belmonte, 2007).

1.6.3   Writing Skill

With the use of word processors, the learner is provided with an automatic detection of error at the level of grammar, spelling and syntax in some cases while given the suggested corrections. Such software prompts the leaner to correct himself and learn from his mistakes while writing. If writing is done through emails or group chat, this encourages collaborative writings and gives the chance for other learners to review the works of their peers and give feedback (Levy, 2009).

1.6.4   Speaking Skill

Among the language skills, speaking is the most used skill in C.A.L.L, voice applications, video recordings and live broadcasting, online audio-visual chat. Learners are given the chance to interact with others and this process encourages the L2 learning (Levy 2009). Hoopingarner (2009) stated that leaner's pronunciation can be improved by the interaction with computers using voice recognition softwares.

1.7   Teacher and Student's Attitude towards using C.A.L.L:

This point is addressed with the focus on the attitudes of teachers and learners from Algerian universities towards the use of computers in teaching or learning. According to S.Meharet in her work "Student's Attitudes toward Computer Assisted English Learning" conducted in the University of Chlef, the attitudes are as following:

1.7.1   Learners' Attitude:

According to the results of her work, the majority of the participants expressed a highly positive attitude towards computers. This attitude had no difference between the genders and 95% of the sample expressed the ability to use computers and technology effectively. 80% of the participants showed their agreement with the notion that computers have a positive effect in improving their language skills and their concentration on the courses. This positive attitude was also discussed by previous Scholars such as Robertson et al. (1995) and Ayers (2002) who said "Learners appreciate and value the learning that they do using the Computers". Another key finding is that participants never experienced the integration of technology in English classes. The middle school's English courses "were just a list of rules and irregular verbs to be retained for the final exams and tests", but with the exposure to the internet and computer, their motivation increased and their view changed and started enjoying it and taking their studies more seriously.

1.7.2   Teacher's Attitude:

In the work of S.Meharet (2011), the teachers' answers to her questions led to the conclusion that although teachers hold a positive attitude and acceptance of technology, there are still some constraints that impede the functional use of C.A.L.L in EFL classrooms. These obstacles can be seen at the level of finance, that English subjects are not important enough to be allocated computers to use, or at the level of training, where the teacher has enough

knowledge and experience at operating a computer but not in using efficiently softwares and platform of C.A.L.L. In the work of M.Boucherfa and M.Baghoussi (2017) "Algerian EFL University Teacher's Attitude towards Computer Assisted Language Learning: Case of Djilali Liabes University". One of the points concluded was that teachers who use computers to prepare their materials are all doing it with their individual efforts and so it is limited in the form of simple activities or worksheets due to lack in training as they responded "insufficient".

1.8 The Situation of the Department of Letters and English Language in the University Centre of Belhadj Bouchaib of Ain Temouchent:

The department of letters and English language in the university centre of Belhadj Bouchaib has first opened its door in 2012. It comprises 496 students in the three first levels of graduation divided as such:

- First year about 120 students are divided into three groups. They have 11 modules to study.

- Second year about 100 students are also divided into three groups. They have 11 modules to study.

- Third year about 97 students are divided into two groups. They have 13 modules to study.

In the second level of graduation, that is, in Master 1, the number of students is about 83 students who are oriented towards one of the following specialties: either advanced studies in Contemporary Linguistics or literature and civilization. There are two groups in Master 1; one group in Linguistics composed of 67 students who have 10 modules and the other one consists of 09 students dealing with literature and civilization studying 9 modules. In Master 2 degree, Advanced Studies in Contemporary Linguistics' group is composed of 45 students

with 9 modules and the Literature and Civilisation group consists of 20 students and study 8 modules.

1.9   Conclusion:

This chapter has focused on providing a general view concerning Computer Assisted Language Learning, its history and development and the different types of CALL used in teaching and learning foreign language. The effects of CALL on the four language skills has been tackled and the different tools used for each skill. Finally, the previous research of an Algerian researcher was taken as a reference in writing about the attitudes of university teachers and students towards using Computer Assisted Language Learning.

The next chapter will be devoted to the field work done by the researcher. It will expose the different methodological approaches and designs used by the researcher as well as the different instruments of collecting data and the analysis of the data gathered.

CHAPTER TWO
Research Designs and Data Analysis

Chapter Two: Research Designs and Data Analysis

2.1 Introduction

In the first chapter, we have dealt with the theoretical part and literature review of CALL, especially how it is beneficial in improving both knowledge and the four skills.

This chapter is dedicated to the process done by the researcher in his attempt to gain insights into the effects brought by introducing one type of C.A.L.L software and monitoring the student's reactions towards the program and the potential gain of using it or the absence of it at the level of knowledge and motivation. The study was conducted in three stages: first, the sample is to answer a pretest concerning grammar at the advanced level than exposed to the software and a short training about the important aspects to use. The participants were give a period of two weeks during the holidays to work with the software, and then answered the post test, and finally given a questionnaire to answer.

2.2 Research Questions

The research was conducted in order to find out the possible effects of using CALL; in an Algerian EFL setting; on the level of students' knowledge and satisfaction resulting in the following research questions:

RQ1: What are the possible effects of using CALL on the learners' knowledge and language skills?

RQ2: What are the effects of using CALL on the learners' attitude and motivation?

These research questions prompted to researcher to formulate the following hypotheses:

Hypothesis 1: the students' knowledge would increase after interacting with the material provided, and their language skills might improve slightly.

Hypothesis 2: the software will have a positive influence on the participants' attitude and motivation.

2.3   Research Designs

In order to investigate this research work, the researcher opted for undertaking a case study. The purpose of using this approach was to collect useful data about the effects C.A.L.L brings to Algerian EFL students. Beside the Case Study, a Quasi-Experiment was conducted using the Pretest-Post test design, in order to monitor the progress of the study as accurately as possible.

2.3.1   Case Study

According to Encyclopedia of Case Study Research, a case study "examines a person, place, event, phenomenon, or other type of subject of analysis in order to extrapolate key themes and results that help predict future trends, illuminate previously hidden issues that can be applied to practice, and/or provide a means for understanding an important research problem with greater clarity." Supported by this definition the researcher used the case study as a means to collect data in order to better understand the key terms and results of the research process, and the participants' attitude towards the materials provided during the study.

The Case Study in this work is the class of first year English students in the department of letters and English language in Belhadj Bouchaib University Center.

2.3.2   Quasi-Experiment Design

According to Devin Kowalczyck, a Quasi-experiment in its simplest definition is "not a true experiment" because what makes a true experiment is the randomly assigned sample which gives equal chance of being in the experimental group or control group.

The main points about the quasi-experiment are that the group that is participating in the study isn't necessarily random and it is up to the researcher's decision to use both the

experimental and the control group or only the experimental group. In this work the researcher selected the members of the first year English students in the department of letters and English language in Belhadj Bouchaib University Center.

2.3.3   Pretest-Posttest Design

According to Neil J. Salkind in the Encyclopaedia of Research Design "The basic premise behind the pretest–posttest design involves obtaining a pretest measure of the outcome of interest prior to administering some treatment, followed by a posttest on the same measure after treatment occurs. Pretest–posttest designs are employed in both experimental and quasi-experimental research and can be used with or without control groups. For example, quasi-experimental pretest–posttest designs may or may not include control groups, whereas experimental pretest–posttest designs must include control groups."

In other words, this research design; which commonly used in education where researchers monitor the effect of a new teaching method upon their sample; can be better explained by following its main three step process:

- Test the participants prior to the experimental manipulation.
- Perform the experimental manipulation.
- Test the participants after the manipulation to see what changes occurred.

This research design was used in this work to monitor the changes occurred to the sample after exposing them to the software provided during the study.

2.3.4   Sample Population

For the sample of this study, twenty students of first year EFL students in the department of letters and English language in Belhadj Bouchaib University centre have been randomly selected out of one group from the three groups that constitute the total population which is (120) students.

The researcher has chosen this population during the academic year 2017/2018.

2.3.5 Student's Profile

The students involved are first year English students in the department of letters and English language in Belhadj Bouchaib University centre. They were chosen because they fulfil the criteria needed for the research to be undertaking. These criteria were:

The mastery of the English language to an acceptable degree which they fulfil as of first year English students in the department of letters and English language in Belhadj Bouchaib University centre. The ability to manipulate efficiently computers as well as possession of personal computers to operate the software provided during the study.

2.4 Instruments of Data Collection

In this study, the research tries to answer two main questions; each question needs one instrument to collect data in order to answer it.

The first question is about the influence of the manipulation at the level of knowledge, and to answer it, the correlation between the participant's knowledge change and the materials provided during the study needs to be studied and this lead the researcher to resort to the pretest-posttest research design and the tool as a test. This decision is supported by the previous works of scholars in the field of research in education.

2.4.1 Test

Test is defined as a means of measuring the knowledge, skill, feeling, intelligence or aptitude of an individual or group. It produces numerical scores that can be used to identify, classify or evaluate test takers (Gay, 1996).

There are two types of tests:

Norm-reference: it is a test that produce scores that tells us how individual's performance compares with other individual. This test is for comparing others, usually used in

measuring the potentials of a person such anxiety, creativity, intelligence. This type of test doesn't serve the researcher in his work (Borg & Gall, 1983).

Domain- reference: this type of test measures the learner's level of performance in a precisely defined content area or domain. It is used to measure the level of performance and specific deficiencies in the domain covered by the test. This type of test is what the researcher used in order to measure the change at the level of knowledge before and after the manipulation.

The second research question is about the satisfaction and motivation of the participants after they have used the materials provided. To answer this question, the researcher opted for the questionnaire as a tool for collecting the needed data. This is guided by several researchers.

2.4.2   Questionnaire

Questionnaire can be used for exploring people's attitudes, perception, views and opinions (Black, 1999). This tool also provide results with statistically significant outcomes (Denscomble, 1998), and according to Cohen et al. (2000, p.129), the questionnaire is more reliable then interview because of its anonymous feature, which "encourage greater honesty". Moreover, CALL research methods which can present evidence about learner's opinions on the value of the CALL task are required (Chapelle, 2001). The last point is focused on by the researcher in the second part of the questionnaire provided in addition to questions about the effects of the materials provided at the level of satisfaction and motivation.

2.5   Field Work Process

In this study the researcher tries to answer two research questions. In order to that, two research instruments were conducted in order to gather useful data. The first instrument is the

pretest-posttest and the experimental manipulation, in order to measure the change at the level of grammar knowledge. The second instrument is a questionnaire, in order to collect student's view points, the effect of the experimental manipulation on the level of motivation, and finally their satisfaction towards the material provided. This research process followed a three stage plan which is as follows:

-**Stage One**: Introduce the study to the participants, explain to them the process and what their part in it is. They were given the pretest to answer in a ten minutes timeframe, the participants were asked to use nicknames to be anonymous to assure the unbiased treatment of the results. After that, they were given the CD-Rom containing the Oxford English Grammar Course, and given a quick tutorial on how to use it as well as the salient features that should be focused on. At the end of the first session, the participants were asked to use the software, precisely the advanced level portion of it during the holidays.

-**Stage Two**: the participants used the software during a fifteen days period (Holiday).

-**Stage Three**: the posttest was administered also in a ten minute timeframe. After collecting it, the final task was to give the participants a questionnaire to answer.
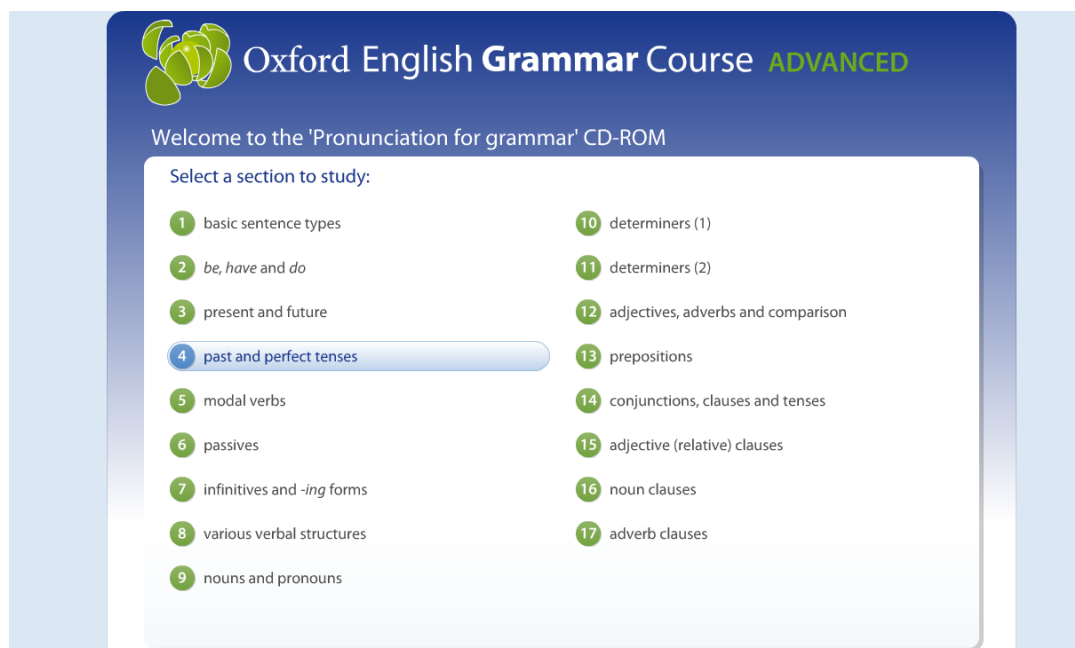
Figure 2.1: Oxford English Grammar Course, the software provided for the experimental manipulation

2.6   Data Analysis Procedure

The research work is based on quantitative methods of data collection, as both of the instruments are designed in order to measure the effects of the manipulation, and this measuring can only be done trough numerical data collected from the pretest-posttest as well as the questionnaires. This approach is guided by scholars of research in education who said "Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques."(Babbie, Earl R. 2010) "Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon."(Muijs, Daniel. 2010). I.e. the quantitative methods assure an objective measurement of the changes, as well as giving us the possibility of generalizing the results.

Throughout the analysis, the results will be presented in the form of tables and percentages as well as their interpretations in the form of graphs.

2.6.1   Analysis of the Pretest-Posttest Data

The pretest was used in order to establish a baseline to know the level of mastery the participants have over the domain they were examined in, as well as to use it in the comparison between their level now and later.

The posttest was administered in order to establish the level of the participant's mastery of the domain after the two weeks of using the software provided.

The pretest and posttest was distributed to 20 participants, of which only 16 are viable for the study.

2.6.1.1   -**The Results of Pretest-Posttest**

The participants used nicknames for identification which will be replaced in this table

by "Student x".

Participants	Pretest results	Posttest results	Change
Student A	3/10	8/10	+5
Student B	5/10	3/10	-2
Student C	7/10	7/10	0
Student D	4/10	5/10	+1
Student E	4/10	9/10	+5
Student F	3/10	6/10	+3
Student G	5/10	7/10	+2
Student H	4/10	3/10	-1
Student I	4/10	7/10	+3
Student J	8/10	9/10	+1
Student K	5/10	5/10	0
Student L	6/10	7/10	+1
Student M	6/10	6/10	0
Student N	4/10	6/10	+2
Student O	5/10	4/10	-1
Student P	6/10	6/10	0
Average	4.93	6.12	+1.19

Table2. 1: STUDENT'S PRETEST-POSTTEST RESULTS

This table shows the results of the student's marks of both the pretest and posttest. In

this table the change in the marks can be seen that it follows three patterns. The first pattern is

the drop in the results of the posttest in comparison to the pretest, this drop in mark is noticed

in only **three** student's results and the drop is **(-1)** for **two** students and **(-2)** for only **one**

student. The second pattern of change is the no change in results. This pattern is noticed in the results of **four** students who are registered in the table as having the change value **(0)**. The final third pattern is the positive improvement in the results scored by **nine** students which constitute the majority of the sample. This improvement is also varying from; a minor improvement of just **(+1)** which is noticed in **three** student's results; to a medium improvement of **(+2)** and **(+3)** which is noticed in **two** student's results respectively for each mark for a total **four** students who had a medium improvement; and the final pattern is the major improvement of **(+5)** which is noticed in the results of **two** students. Finally, the average from both the pretest and posttest of the whole sample was compared to see the change, and the result was a positive improvement of the whole sample which scored **(+1.19).** These results demonstrate to us the degree of success of this Quasi-Experiment.

Number of Participants	Nature of Change	Percentage (%)
3/16	Negative change	18.75%
4/16	No change	25%
9/16	Positive change	56.25%

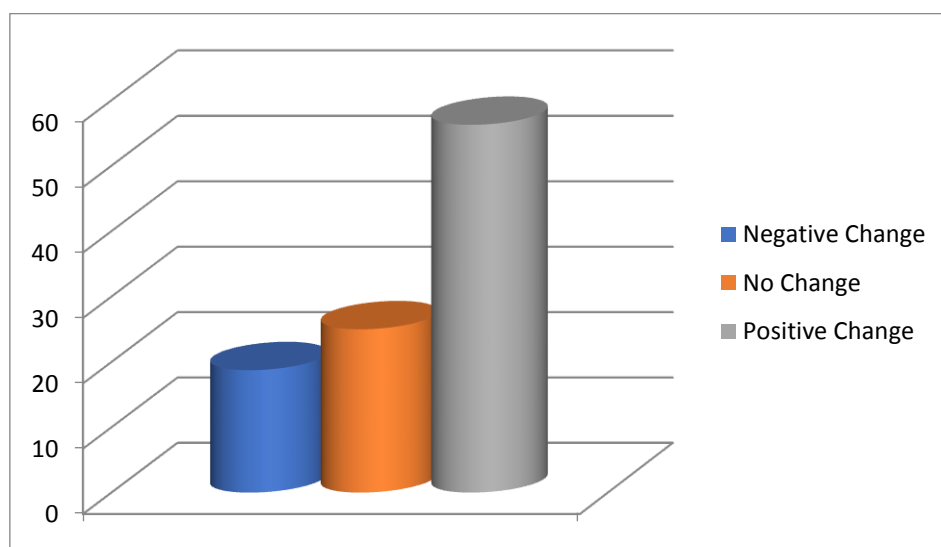**Table2. 2**: STUDENT'S MARKS CHANGE BETWEEN THE PRETEST AND POSTTEST

Figure 2.2: STUDENT'S MARKS CHANGE BETWEEN THE PRETEST AND POSTTEST

The aim of this process is to find how much does the use CALL software benefit the student's knowledge of grammar. The table above shows that only **(18.75%)** of the participants had lesser marks in the posttest then the pretest which means only **03** students had bad marks. while **(25%)** of the participant's marks haven't changed, in other words **04** members kept the same mark. Finally, **(56.25%)** of the members or **09** participants have improved their results after working with the CALL software provided. These results show us that the manipulation had a positive effect on the results.

2.6.1.2 Summary of the results

The pretest-posttest design used in this study was in order to measure the improvement of the participants after using the CALL software. The results were in favour of this notion. The results were divided into three sections. The first section is for 03 students' drop in marks after the manipulation, the drop was minor as it was limited to only one or two points. The second section is the 04 students' marks which didn't change. The final section is reserved for the majority of the sample who scored better than before the manipulation. The 09 participants had improvements varying from minor addition of one or two points to a major addition of five points in the posttest. These changes at the level of grammar knowledge can be attributed to many variables which will be discussed further in the third chapter.

2.6.2 Analysis of Student's Questionnaire

The questionnaire was used in order to determine the student's linguistic background, their contact and use of technology to learn, their reactions and opinions about the software provided to determine their satisfaction as well as the effect of using CALL materials on their motivation in learning the English language. The questionnaire was distributed to 20 participants and only 16 are viable.

2.6.2.1   The results of the questionnaire

The questionnaire was given to a total of 20 participants of which only 16 are viable. The questionnaire consists of three sections which are as following.

Section One: Background Information.

This section is devoted to finding out the participants' background knowledge and contact with the English language as well as their reliance on computers and internet in addition to what tools they use to assist in their language learning.

Q1: How long have you been studying English?

Number of years	Repetition	Percentage %
7 years	7	37.5%
8 years	8	56.25%
9 years	1	6.25%

Table2. 3: Students' Years of studying English
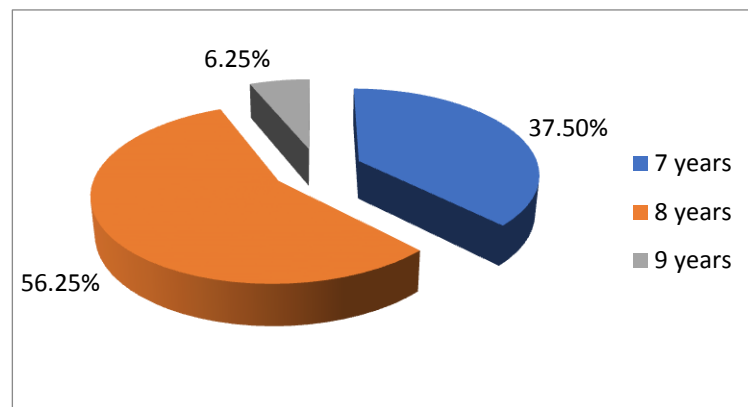
Figure 2. 3: Students' Years of Studying English

The goal behind asking this question is to find how many years the participants studied English in order to give us an idea about their approximate level of language mastery. The table and graph show that the majority of the students which is **(56.25%)** or about **09** participants have studied the English language for 08 years, while **(37.5%)** or **06** students

have studied English for 07 years. There was only **01** student in the sample who studied the

English language for 09 years which constitute **(6.25%)** of the whole sample.

Q2: Do you use computers and the internet in learning English?

The answer	Repetition	Percentage %
Never	0	0%
Rarely	0	0%
Sometimes	06	37.5%
Always	10	62.5%

Table2. 4: STUDENTS' FREQUENCY OF USING COMPUTERS AND INTERNET IN LEANING ENGLISH
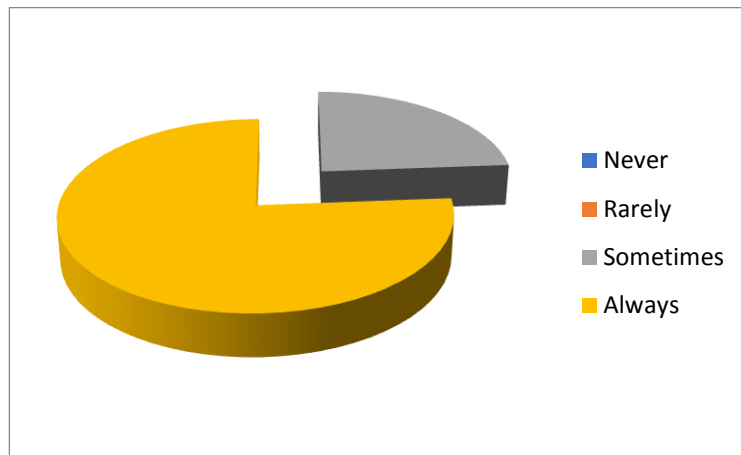
Figure 2.4: STUDENTS' FREQUENCY OF USING COMPUTERS AND INTERNET IN LEANING ENGLISH

This question was asked in order to determine the frequency of using computers and

internet by the participants. **06** participants or about **(37.5%)** of the sample have answered

with sometimes, while the majority of the sample **(62.5%)** or **10** students declared that they

always use it. Finally, the staggering response of **0** participants who never or rarely use

computers and the internet show us that the students are already in favor of using technology

in learning.

Q3: if you use it, what kind of means do you use?

The answer	Repetition	Percentage %
Google	13	81.25%
YouTube	10	62.5%
E-Books	2	12.5%
Other Software	2	12.5%

Table2.5: THE KIND OF MEANS USED BY STUDENTS.
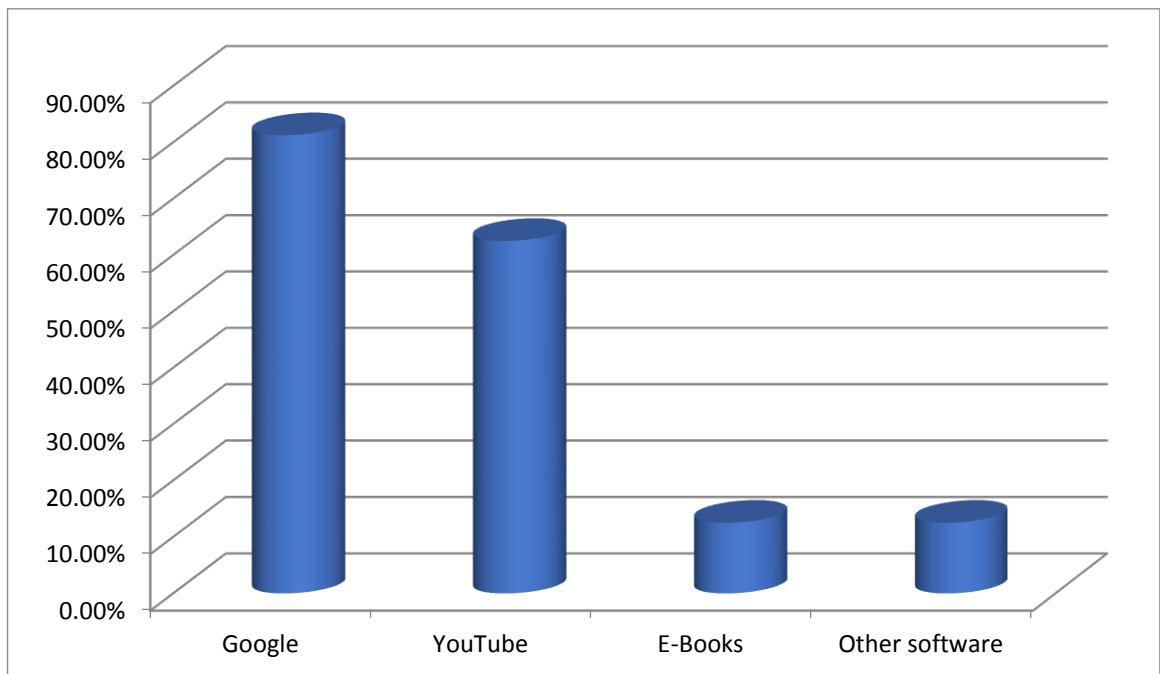
Figure 2.5: THE KIND OF MEANS USED BY STUDENTS.

This question is a follow up of the previous question. The aim of asking this was to figure out the types of tools used by participants in learning English. The participants can answer with more than one answer so the statistics are calculated in a different manner than the previous answers. The most popular tool used by the participants was Google as **13** members or **(81.25%)** of the sample opted for it, while YouTube is also popular with the

students as **10** participants or **(62.5%)** answered that they use it in their language learning. The minority answered that they use E-Books or other software as only **02** students or **(12.5%)** declared their use of it while the rest doesn't. this table show that the participants' knowledge of useful tools of computer and internet in improving learning the English language is quite limited, and needs to be further expanded in the future.

Section Two: Reactions and Opinions about the Material Provided:

This section is devoted to finding about the how did the participants find the material provided, to collect their reactions and opinions towards the use of CALL softwares.

Q1: Please rate the software according to your satisfaction and how much do you find it helpful:

The answer	The rating	Repetition	Percentage %
The level of Knowledge (Grammar Lesson)	Not useful	0	0%
	Useful	8	50%
	Very useful	8	50%
The level of speaking and listening skills	Not useful	0	0%
	Useful	11	68.75%
	Very useful	5	31.25%
The level reading and writing skills	Not useful	0	0%
	Useful	8	50%
	Very useful	8	50%
Encouraging self learning (Autonomous Learning)	Not useful	1	6.25%
	Useful	12	75%
	Very useful	3	18.75%

Table2.6: STUDENTS' SATISFACTION AND RATING OF THE SOFTWARE.
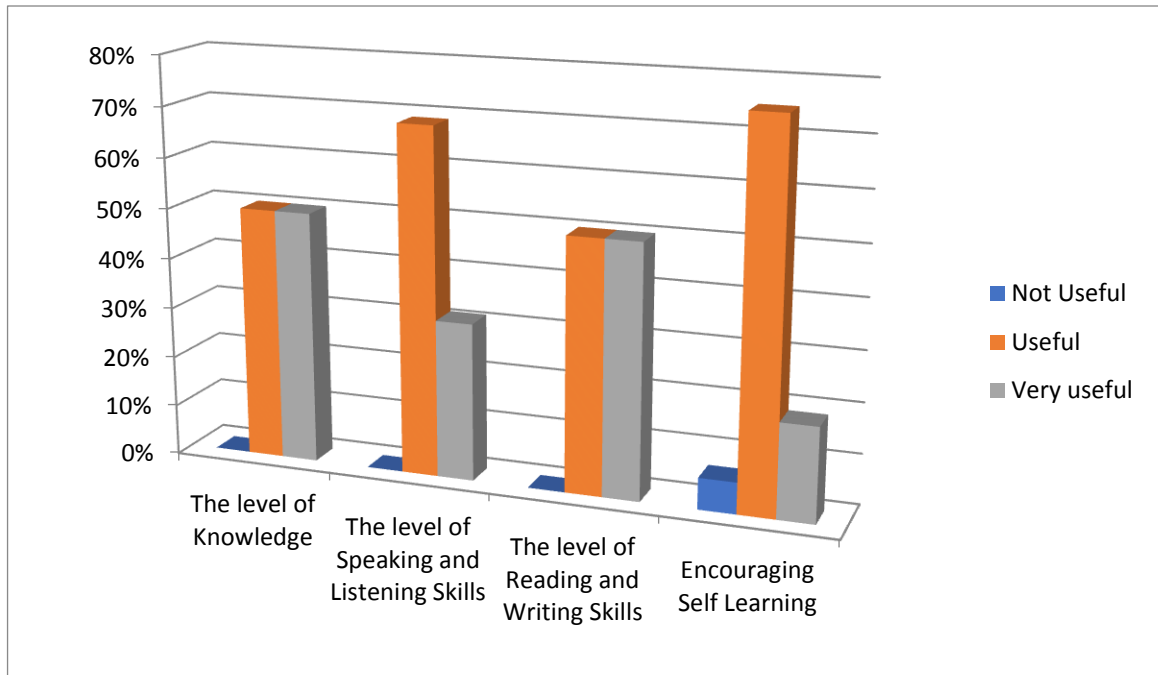
Figure 2.6: STUDENTS' SATISFACTION AND RATING OF THE SOFTWARE.

The aim of this rating is for the participants to express their satisfaction towards the software as well as to express how much do they find the material provided useful in developing their skills. The first question was about how much does the participant find the material useful in developing his knowledge, in the case of this software, it is the grammar knowledge that was tested. The answers was cleanly divided in half where **08** participants or **(50%)** of the sample answered for each rating that it was useful and very useful, while none rated it as not useful. The second question was about the level of Speaking and Listening. The majority of the sample consisting of **11** students or **(68.75%)** answered that the software was useful in improving their skills, while the rest which were **05** participants or **(31.25%)** rated it as very useful, and the same as the first question, none rated it as not useful. The third question addressed the level of Reading and Writing, the sample's answers was also divided **50-50** between useful and very useful while no one rated it as not useful. The last question which was to determine the influence of the software on encouraging self learning (Autonomous Learning) , the majority consisting of **12** students or **(75%)** answered that is

was useful, while **03** participants or **(18.75%)** answered that is was very useful. Only one answer was collected which rated the software as not useful in encouraging self learning. This rating has a great impact on the study and the answer to the second research question.

Q2: if you find other things you like, please mention them here…..

This is a follow up question after the rating. Unfortunately no answer was collected to this.

Q3: After using this software, are you open to use it or similar software more in the future?

The answer	Repetition	Percentage %
Yes	14	87.5%
No	2	12.5%

Table2. 7: STUDENTS' ATTITUDE TOWARDS USING THE SOFTWARE IN THE FUTURE.
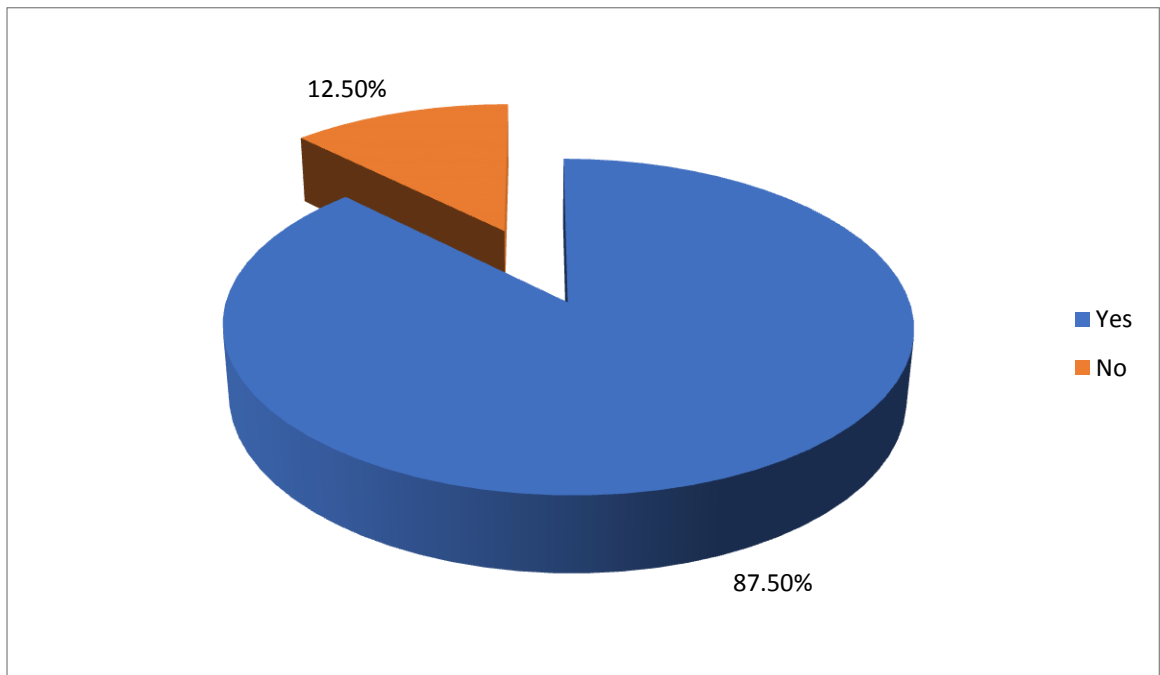
Figure 2.7: STUDENTS' ATTITUDE TOWARDS USING THE SOFTWARE IN THE FUTURE.

This question's aim was to see the openness of participants towards the software and see if they like it enough to use it more in the future. The majority of the sample answered with yes, that is 14 students or (87.5%) of the sample while the rest 2 participants or (12.5%) answered with the negative.

Q4: Would you recommend using this approach of using computer to learn English by yourself to other students or people in the future?

The answer	Repetition	Percentage %
Yes	16	100&
No	0	0%

Table2. 8: STUDENTS' RECOMMENDATIONS FOR USING THE SOFTWARE IN THE FUTURE.
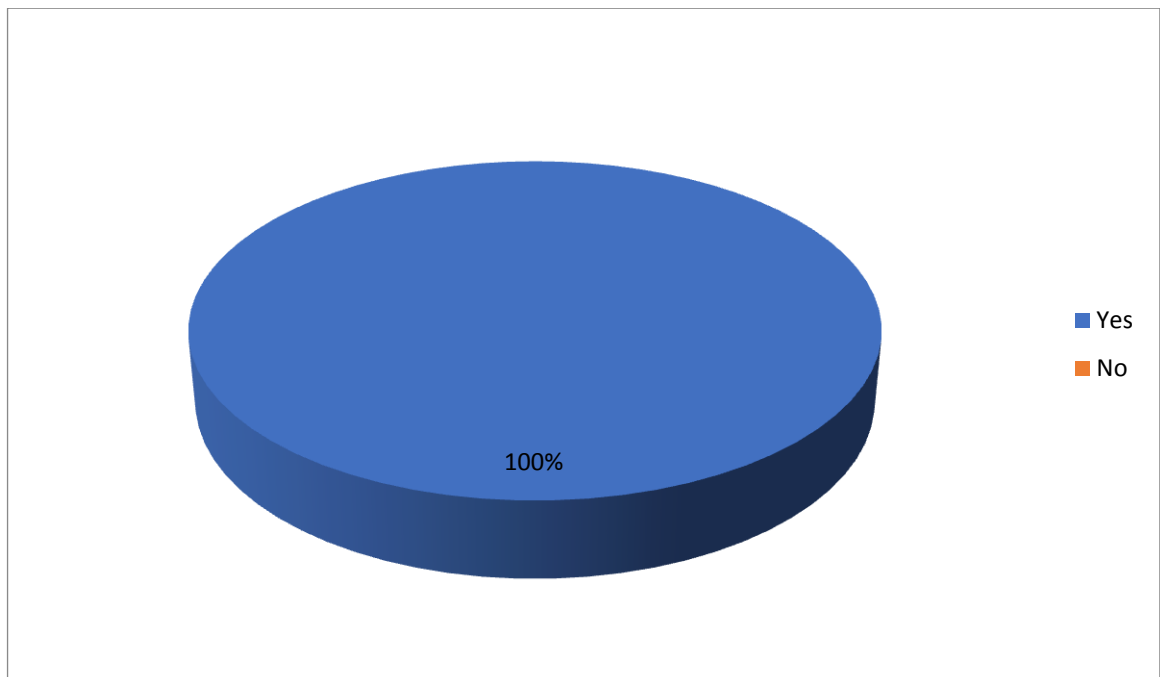
Figure 2.8: STUDENTS' RECOMMENDATIONS FOR USING THE SOFTWARE IN THE FUTURE.

The question was asked in order to confirm the attitude of the participants and see if they would recommend the use of CALL software to others in the future. The answer was an overwhelming (100%) yes answer where all 16 students declared that they would recommend

it. This is shows that students were satisfied with the software or at least they like it enough to recommend it to others.

Section Three: Motivation.

This section of the questionnaire is focusing n the effect of the CALL software on the motivation of the participants in their English language learning.

Q1: Do you find the use of this software to learn English interesting?

The answer	Repetition	Percentage %
Yes	16	100&
No	0	0%

Table2. 9: STUDENTS' INTEREST IN USING THIS SOFTWARE.
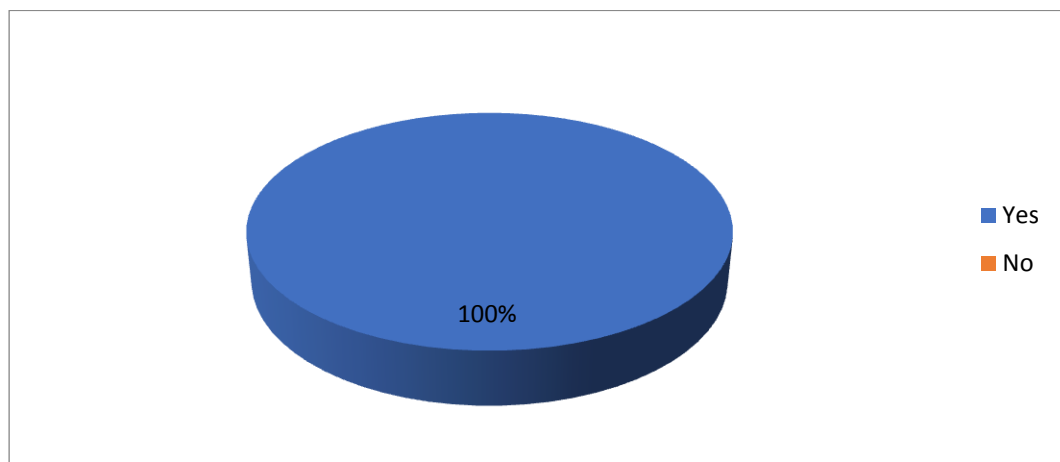
Figure 2.9: STUDENTS' INTEREST IN USING THIS SOFTWARE.

This question was aimed to measure the interest of the students in learning English through the use of CALL softwares and the answer was 100% positive, where all 16 students answered with yes.

Q2: On a scale of (1~5), how much does the use of this software affect your motivation in comparison to the traditional methods of teaching?

The rating	Repetition	Percentage (%)
1 star	0	0%
2 stars	0	0%
3 stars	7	43.75%
4 stars	4	25%
5 stars	5	31.25%

Table2. 10: STUDENTS' RATING OF THE EFFECTS OF THE SOFTWARE ON MOTIVATION.
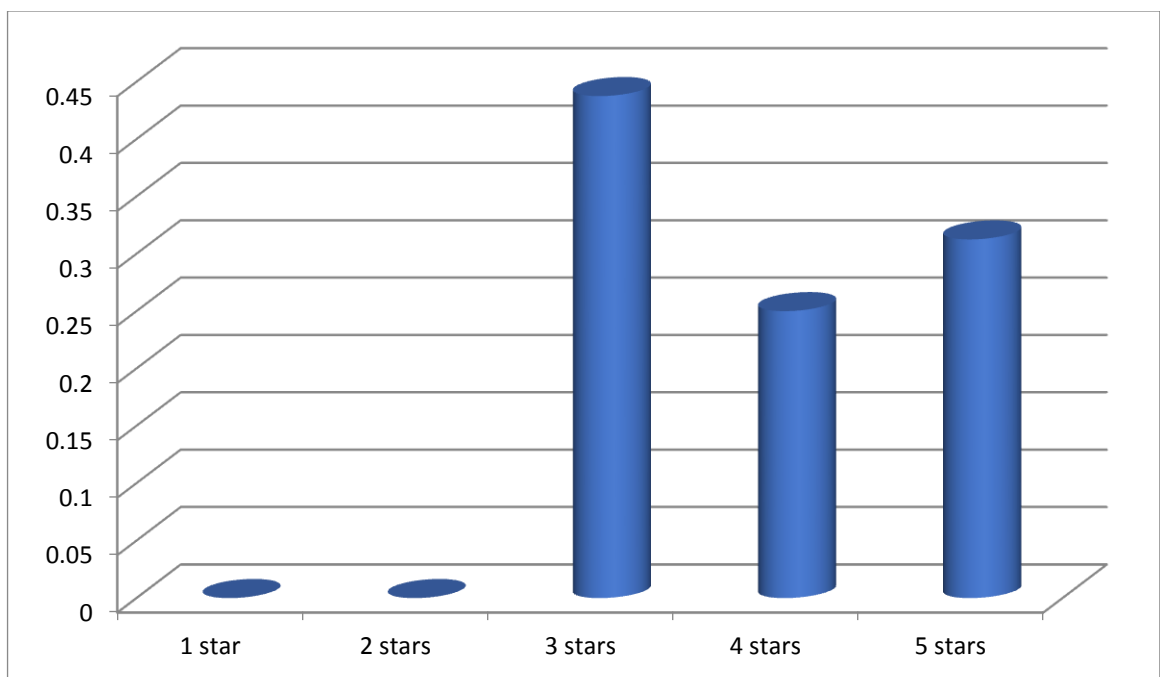
Figure 2.10: STUDENTS' RATING OF THE EFFECTS OF THE SOFTWARE ON MOTIVATION.

The final question of this questionnaire was asked in order to quantify the student's motivation after using the CALL software in comparison to the usual or traditional methods of teaching. The answers for 1 star and 2 stars were 0 as no one rated it as such. 7participants or (43.75%) rated the effects on motivation as 3 stars, while 4 students or (25%) of the sample answered with 4 stars. The rest which are 5 students or (31.25%) rated the effects as 5 stars

which is the highest rating. The answers in general states that according to the participants, the CALL software has great effect in enhancing the motivation of students when learning compared to the usual teaching methods.

2.6.2.2 Summary of the Main Results

The analysis of the students' questionnaire reveals that the period of time of studying English ranges from 7 to 9 years. The majority of the sample use computers and internet in learning English with varying degree, while the tools used by them are heavily inclined in the direction of Google and YouTube, while no major use of the other suggested answers. The ratings of the effects of using CALL software on the level of knowledge and skills collected from the participants reveals a positive answer, as all the sample either answered with useful or very useful ratings. The answers to the rest of the questions related to this part inform us that the students were satisfied with the software. The last section was focused on motivation, and the answers collected from the participants reveal that they find the software has great effects in improving their motivation in learning English.

2.7 Conclusion

To conclude, we can say that from the data collected from the pretest-posttest, the CALL software has a benefiting effect at the level of improving the knowledge of students. While the results of the administered questionnaire affirmed the benefits of using CALL software at the level of the four skills and improving self learning as well as motivating students in learning English more than the usual techniques.

In the following chapter, the results of the pretest-posttest will be discussed in more details, as well as the finding gathered from the questionnaires. Some suggestions and recommendations will be provided for further researches in the future.

Chapter Three:

Discussion and Interpretation of Main Results.

Chapter Three: Discussion, and Interpretation of Main Results.

3.1 Introduction

We have discussed in the previous chapters the use of Computer Assisted Language Learning in teaching and learning foreign language and particularly the effects of using it at the level of improving knowledge, the four skills as well as motivation. The aim of the current chapter is to discuss deeply the results gathered and mentioned in the previous chapter as well as summarizing the findings of each research question. In addition, it will provide the advantages and disadvantages of using CALL, as well as mention the limitations of the study that may restrict the applicability of the findings, which will later guide us in providing helpful suggestions and recommendations that can assist teachers and learners in benefiting as much as possible when using Computer Assisted Language Leaning materials in teaching or learning a foreign language.

3.2 Discussion of the Main Results

3.2.1 Findings for research question 1

The first research question in this study investigated the effects of using computer assisted language learning materials on the learner's knowledge and subsequently on their four language skills. By looking at the quantitative analysis of the participant's test results, the participants' knowledge improved. Further, the analysis of the ratings on the questionnaire suggested that after working with the software provided, most participants expressed that they noticed an increase at the level of their knowledge as well as improvement at the level of the four skills. Thus these findings are in line with the hypothesis of the first research question.

Although the analysis demonstrated significant effects for knowledge improvement for most of the students, the results were not all as expected. As mentioned in the quantitative analysis the majority of the students had a remarkable increase in results, but the rest either had no improvement or scored less, these results may be attributed to variables beyond the control of

the researcher and which may limit the study, these variables will be discussed later in this chapter. The second part of the research question regarding the four language skills, drew its findings from the answers of the students, these answers were their own evaluation of their progress and the development of their skills, this again might be argued against in the sense that these evaluations are biased and they are only speculations made by the participants and need further objective examination in order to determine their reliability. This point is also influenced by limitations which the researcher faced and will be mentioned later on.

In short, the findings for this research question demonstrate that there is a strong positive effect of the computer assisted language learning software on learners' knowledge as well as the four skills.

3.2.2   Findings for Research Question 2

The second research question focused on the effects of the computer assisted language learning software on the students' satisfaction as well as motivation. The analysis of the quantitative data for this research question demonstrated a favorable impression of the participants towards the CALL material provided. The majority of the participants gave high ratings for the software and declared that they will use it in the future as well as recommend it for others in the future which are points that show their attitude towards the software. The last part of the questionnaire was aimed at answering the second part of the second research question, which was about the effects at the level of motivation. The data gathered demonstrated the interest of the participants in using this tool in the future, although these are great findings that support the study, this might be attributed to the fact that they are not familiar to this kind of software as shown in the previous questions analyzed, and that it is interesting to them only because it is something new, and this interest will die sooner or later. This issue prompts an extended research with longer time span to conclude the results, and this is also one of the limitations which will be discussed later. The last question was for the

participants to rate the effect of using CALL on their motivation. The answers were favorable, the minimum rating was 03 out of 05 and there were even 05 out of 05 answers. The quantitative analyses of this data lead us to the conclusion that the CALL has a great positive effect on the improvement of the students' motivation. Thus the findings are in line with the hypothesis of the second research question.

In short, the findings for this research question demonstrate that there is a strong positive effect of the computer assisted language learning software on learners' satisfaction with the materials as well as their motivation for studying.

3.3   Advantages and Disadvantages of CALL

This point deals with both the positive aspects that CALL can bring to the learning and teaching process and also the negative aspects.

3.3.1   Advantages of CALL

From the findings gathered from both the pretest-posttest and the questionnaires, it is clear that the use of CALL is remarkably beneficial and brings positive improvement to students not only to their knowledge and language skills but also to their motivation. Accordingly, the advantages of using computer assisted language learning softwares are not limited only to the mentioned points. There is significant evidence of the benefits of using CALL on different levels which are to be discussed in this part.

3.3.1.1   Learner factors

One of the best characteristics of CALL is the power to adapt. Which allows the content to be used according to the learner's abilities and preferences, it can adapt to the different cognitive and learning styles (Visual, Auditory, Tactile….), as well as adapt to the learner's self-paced learning, where slow learners can study and review the content at ease. Another feature of CALL is that it allows the learners to control their own learning process

and progress by providing them with individualized and private learning, and the capabilities of choosing their paths of learning. This leads to the construction of a neutral medium. Compared to teachers who can get angry or lose patience, computers can create a safe and positive learning environment.

3.3.1.2   Motivation and Attitudes

The possibilities a computer can bring to the learning process is something that has great influence on the motivation of the learner. CALL provides this strong motivation as students can do things with a computer which are not possible to do with a textbook or paper and pen. The addition of features such as graphics, sound and animation are what makes the learning/teaching process more interesting and motivating which can on the long term improve learners' attitudes toward learning languages in general and English in specific.

3.3.1.3   Mastery and Co-operative Learning

In this point we review the opportunities CALL provide learners. These opportunities can be seen at the level of learners learning a language by means of individual efforts in order to master language skills, such as the software used in this study, or by The addition of internet and co-operative games or means of communications which are easy to use and provides the learner with means to learn cooperatively as a result of working together in a group or through chats which also has value in providing the learner with authentic communication and language in case of speaking with native speaker. This can also lead the learner to be exposed easily to the culture of the speakers which is a very important key of a language.

3.3.2 Disadvantages of CALL

3.3.2.1 Cost

Schools may lack funds for CALL implementations as hardware and software are expensive. In addition, the development of good CALL software requires expensive process, equipments and cooperative teamwork.

3.3.2.2 Training

A lot of teachers still lack training and skills in using CALL softwares and training costs are high and time consuming. Training learners to use computers can take the students' time away from other educational activities. This lack of training can be noticed when technical issues at the level of hardware or software arise and waste time and money.

3.4 Limitations of the Study

The limitations of this study can be divided into three types, the internal limitations caused by the process and tools of the study as well as the external limitations caused by the environment the study was conducted in, and the last one is the ethical barriers that impedes certain research designs and methodologies,

The internal limitations are caused by the nature of research design, tools and methods of gathering data. The measure of knowledge improvement is one of the limitations of this research that stems from control over the design and measurement. The study instruments elicited constrained responses on the pretest-posttest to measure the learner's grammar knowledge. The test was limited to only some of the cases of grammar rules and is not representatives of the total knowledge of the students. According to Truscott (2007), the arguments in favor of grammar instruction can be valid only when improvements in accuracy are found on tests of communicative ability, while the structure of the test was only limited to some applications of some rules.

The other limitation is concerned with the questionnaire's collected data concerning the improvement of the language skills. As mentioned in the discussion, the nature of the response was the self evaluation of the students themselves. Although self evaluation can be taken into consideration as a form of assessment, to further consolidate the reliability of the results, the researcher needed to conducted tests to measure the four language skills separately. These limitations are also driven by the external factors affecting the study.

The external limitations are in simple words, the environment in which the study was conducted forced the researcher to take certain choices. The first limitation is the cost. Money is always an issue to be taken into consideration when researches are concerned, the CALL software that are highly advanced are expensive to buy, and even more expensive to use in a research. The tools such as computers and internet are not always available in schools, which forced the researcher to select the first year English students of a university instead of middle school students who are just learning the language from the start. Another limitation is the lack of CALL softwares designed specifically for the Algerian school curriculum which can be used, instead of the software used in the study.

Another limitation is Time, the field work was conducted in a time frame of Two weeks, where the researcher and participants only had time to work in a limited period of two sessions, and the rest was for the experimental manipulation. This time frame is very short when the components of the study are taken into consideration. The four skills and language knowledge which were studies needs more than just two weeks to improve, at least a year of work is needed for valuable data to be collected. The last limitation was already briefly mentioned during the discussion, the researcher's control over the sample during the two weeks holiday when the participants used the software was lacking if compared to a controlled environment such a classroom where he can assure that all participants used the

software in the adequate time and manner intended, and this limitations are also influenced by the third and last type of limitation which is the ethical limitation.

As already mentioned before, the timeframe and control over the experimental manipulation was adapted by the researcher to the best applicable process that can be realized by him which falls under the umbrella of the quasi-experimental design.

The reasons behind this limitation are the moral constraints of the researcher which prevent the possible harm that can befall the participants if the ideal timeframe and control intended was applied. The applications of CALL are still under research, and despite the positive outcomes the studies shows, it is still an experimental method, and when applied at students for a long period of time, it can harm them as they have missed the education that the other students who studied normally have. The notion of a control and test group is also impeding the study over a long time period, as the test group is in a sense is "sacrificed" for the reasons mentioned above, and this problem can only be solved if the study was undertaken by the government where they assure that the students affected by the study won't face problems along the course of their studies and employment.

Overall, the limitations of this study do not appear severe enough to jeopardize the finding of the study. However, they definitely put the findings into perspective.

3.5   Recommendations and Suggestions

Based on the data collected and the previous writing along this chapter, the research findings warrant more studies that focus on creating new softwares based on the Algerian curriculum. Moreover, the different types of CALL open the doors to a vast field of research, this study focused only on the use of software that is intended for grammar and the four skills, but there are a variety of softwares to use, such as the applications of using Concordancers in promoting the foreign language cultural knowledge of non native speakers, the constant contact with texts rich with cultural context as well as the access of non native speakers to

corpora of native language and the use of Concordancers in order to determine the most used language forms can improve the production to near native speech.

The effects of using game based lessons in reducing anxiety for young non native speakers. The children of our schools learn French at a young age and may face troubles with the language since it is something new and strange and may cause them stress and anxiety, the incorporating of "fun" lessons might reduce this anxiety and might even motivate them more to learn it.

As discussed previously in the advantages of CALL, the opportunities it can give are numerous, one of which is the ability to speak with native speakers through the internet via video chat, a future study can be conducted in order to see the influence of this application on the improvement of learner's knowledge and skills in a controlled environment where the language used is formal and not the net language. Moreover, the net language produced by means of using CALL can be studies in itself in order to monitor the creation of new variation at the level of language or even culture.

Finally, Computer Assisted Language Learning is a field that teaches languages, any languages. So another fruitful direction of research can be the replication of this study with different languages and different levels of learners.

3.6 Conclusion

This chapter was dedicated to the discussion of the research question findings, exploring the advantages and disadvantages of using CALL leading to the limitations of this study, and from these limitations and the points discussed before, the researcher provided suggestions and recommendations for future research.

General Conclusion

Computer Assisted Language Leaning is the field born from the applications of Technology in education, and it has provided many new tools and opportunities to enhance and improve language learning and teaching process in a manner that is beyond the limitations of a classroom, in other words, to give the learners the chance to control their learning to match their own pace, and facilitate the teachers' task by substantiating their lessons with physical representations of language. The researcher was inspired by the use of these instruments in his classes and decided to promote them beyond the classroom which started this research.

In this dissertation, the researcher's aim was to investigate the effects of using CALL on the knowledge and skills as well as motivation and attitude of students.

This research is a case study. The researcher conducted a quasi-experiment in order to answer the first question, in which a pretest was administered to measure the knowledge of the participants concerning grammar at the advance level, the experimental manipulation in the form of using an Oxford grammar teaching software was performed by the participants for two weeks, and then the posttest was administered in order to compare the results of both test. For the second question, a questionnaire was administered to the first year English students of the department of English at Belhadj Bouchaib University Center of Ain Temouchent to collect the necessary information about their attitudes and motivation. The data was quantitatively analyzed.

This research work comprises of three chapters. The first chapter dealt with the importance of using technology in education. Moreover, the definition of Computer Assisted Language Learning, its history and development as well as the different types of CALL used

and its effects on the four language skills was included and ended it with the attitudes of Algerian students and teachers towards the use of CALL.

The second chapter dealt with the methodologies and approaches the researcher adapted in his field work. The chapter described the population and the sample, the tools and instruments used in gathering data, as well as the quantitative analysis and summary of the main results.

The third chapter attempted to discuss deeply the results analyzed in the second chapter, after which it demonstrated the advantage and disadvantages of using CALL, which helped in identifying the limitations of the study and finally lead the researcher to offer suggestions and recommendations for future research.

This research started with a problem about the effects using CALL could bring to Algerian EFL classroom. After the work done and described along this study, the researcher can safely say that he found an answer to his questions. These findings proved the hypothesis postulated at the beginning and based on the findings we can safely say that using Computer Assisted Language Learning in an Algerian EFL classroom has positive effects on students' knowledge, their four language skills as well as their motivation towards learning.

What should be taken into consideration is that this study; like any other study; it has limitations. These limitations can span from the most common problems research faces which are time and money, to limitations because of ethical barriers that impede the expansion of the scope of the study and the length of time to conduct it. This work is only an attempt in order to measure the effects CALL can bring in enhancing teaching and learning the English language. Further research would carry on investigating larger population and extended periods as well the different applications CALL can bring.

Bibliography

Al Balushi,M.(2012). *Computer Assisted Language Learning (CALL) For English Language Teachers' Training in Oman*. University of Oregon.

Ayres, R. (2002). *Learner attitudes towards the use of CALL*. Computer Assisted Language Learning Journal, 15(3), 241-249.

Babbie, E.R. (2010) *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage,.

Bamrung,T (2000). *CALL: A resource book for teachers* Thailand-Australia Science & Engineering Project (*TASEAP*)

Black, R. T. (1999). *Doing Quantitative Research in the Social Sciences: An integrated Approach to Research Design, Measurement and Statistics*. London: Sage.

Borg, W.R. & Gall, M .D. (4th Ed.). (1983).*Educational research: an introduction.* New York: Longman Inc.

Bouchefra, M., & Baghoussi, M. (2017). *Algerian EFL University Teachers' Attitudes towards Computer Assisted Language Learning: The Case of Djilali Liabes University*. International Journal of Education and Literacy Studies, 5(2), 132. doi:10.7575/aiac.ijels.v.5n.2p.132

Chapelle, C. (2001). *Computer applications on second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Chun, D. M. (2001). *L2 reading on the web: Strategies for accessing information in hypermedia.* Computer Assisted Language Learning, 14(5), 367-403.

Cohen, L., Manion, L. and Morrison, K. (2000). *Research Methods in Education* (5th eds) London and New York: Routledgefalmer.

Denscombe, M. (1998). *The Good Research Guide for Small-scale Social Research Projects*. Buckingham: Open University Press.

Díaz L, C. H., Bruce J, L. E., & Martínez.N, A. C. (2011). *Percepciones de profesores y estudiantes chilenos de educación media acerca del papel de la tecnología en la clase de inglés como lengua extranjera*. Revista Lasallista de Investigación, 8(2), 53-60.

Dickinson, M., Brew, C., & Meurers, D. (2012). *Language and Computers*. Retrieved from http://www.eblib.com

G a y . L . R . (5th Ed.). (1996). *Educational research: competencies for analysis and application.* New Jersey: Merrill.

Genc, H. (2012). *An evaluation study of a CALL application: With BELT or without BELT*. Turkish Online Journal of Educational Technology - TOJET, 11(2), 44-54.

Han, W. (2008). *Benefits and barriers of computer assisted language learning and teaching*. US-China Foreign Language, 6(9), 40-43.

Hoopingarner, D. (2009). Best *practices in technology and language teaching. Language and Linguistics*. Compass,3(1), 222-235.

Hubbard, P & Levy, M (2006). *"The Scope of CALL Education"* in Hubbard, Philip & Levy, Mike (eds.) Teacher Education in CALL. Amsterdam: John Benjamins. www.stanford.edu/~efs/callted

Hubbard, P (Ed.) (2009). *Computer Assisted Language Learning: Critical Concepts in Linguistics*. London: Routledge. www.stanford.edu/~efs/callcc

Hubbard, P. (2008). *CALL and the future of language teacher education*. CALICO Journal, 25(2), 175-188.

Kolesnikova, A. *"Investigating effects of computer-based grammar tutorials."* PhD (Doctor of Philosophy) thesis, University of Iowa, 2011.

Kowalczyk, D. (n.d.). Retrieved from https://study.com/academy/lesson/quasi-experimental-designs-definition-characteristics-types-examples.html

Levy, M. (2009). *Technologies in use for second language learning*. The Modern Language Journal, 93(s1), 769-782.

Meharet.S. (2011). *Students' Attitudes towards Computer Assisted English learning Case study: 2nd Year Computer Science LMD students*. Chlef University.

Mills, Albert J., Durepos G, and Wiebe E, (2010) *Encyclopedia of Case Study Research*. Thousand Oaks, CA: SAGE Publications.

Morales, Nelson E., *"Use of Computer Assisted Language Learning"* (2014). Education and Human Development Master's Theses. 391.

Muijs, Daniel.(2010). *Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications.

Okonkwo, U. (2011). *Computer Assisted Language Learning (CALL) Software: Evaluation of its Influence in a Language Learning Process*. UJAH: Unizik Journal of Arts and Humanities, 12(1).

Peter G.(2010). *Case Study Research: What, Why and How?* London: SAGE.

Pirasteh, P. (2014). *The Effectiveness of Computer-assisted Language Learning (CALL) on Learning Grammar by Iranian EFL Learners*. Procedia - Social and Behavioral Sciences, 98, 1422-1427.

Reinders, H., Thomas, M. (2012). *Contemporary computer assisted language learning. Retrieved* from http://www.eblib.com

Robertson, S. I., Calder, J., Fung, P., Jones, A. & O'Shea, T.: (1995), *Computer Attitudes in an English Secondary School*, Computers and Education 24, 73–81.

Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, Calif.: SAGE Publ.

Sato, T., Matsunuma, M., & Suzuki, A. (2013). *Enhancement of automatization through vocabulary learning using CALL: Can prompt language processing lead to better comprehension in L2 reading?*. ReCALL, 25(01), 143-158.

Verdugo, D. R., & Belmonte, I. A. (2007). *Using digital stories to improve listening comprehension with Spanish young learners of English*. Language Learning & Technology, 11(1), 87-101.

Warschauer, M. (1996*). "Computer-assisted language learning: An introduction"*. In Fotos, S. (ed.) Multimedia Language Teaching. Tokyo: Logos Internationsl, 3-20.

Warschauer, M. (1998*). "Computers and language learning: An overview."* In Languge Teaching, Vol.31, 57-71.

Warschauer, M. (2010). *Invited commentary: new tools for teaching writing*. Language Learning & Technology, 14(1), 3-8.

Warschauer, M., & Liaw, M. L. (2010). *Emerging technologies in adult literacy and language education.* National Institute for Literacy.

Zou, B.(2008). Research *design in a computer-assisted language learning study*. Xi'an Jiaotong-Liverpool University, China. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2008, Vol. 4, Issue 3, pp. 155-165.

Appendices

Appendix A

Behavioristic CALL :

Main-frame and Mini Computers (1950s-1970s)		
Technological Development by Year	**Approaches to Language Teaching**	**Approaches to CALL & Examples**
·1950-Mathematician and computer pioneer Alan Turing predicted that one day there would be a machine that could duplicate human intelligence in every way. ·1951- Whirlwind, the first real-time computer was built. ·1957- FORTRAN language was developed. ·1959-COBOL (Common Business-Orientated Language) was developed. ·1960-Tandy Corporation founded. ·1964-DEC Mini Computer was built. ·1965-BASIC language was developed. ·1967-Development on PASCAL ·1968-LOGO language was developed. ·1970-Development of UNIX operating system. ·1971-First Microprocessor-4004 was invented. ·1972-C language was developed. ·1972-8008 Processor was released by Intel. ·1972-The first international connections to ARPANET are established. ARPANET became the basis for the internet. ·1974-Introduction of 8080. An 8 Bit Microprocessor from Intel. ·1975-Formation of Microsoft by Bill Gates and Paul Allen. ·1976-Apple Computer, Inc. founded, releasing the Apple II, first mass-market of PC.	· Empiricist theory · Behaviorism · Audiolingualism · Structural Linguistics Principles of Language Learning: · Focus on stimulus, response, reinforcement. · Language learning is a process of habit-formation. · Focus on drill and practice. · Learn through imitation and repetition. · Give immediate feedback. · Individualized instruction was included to serve the pace of the learner.	Behavioristic CALL (eg. PLATO project: Aims at providing interactive, self-paced learning using mainframe computers.) Main characteristics of behavioristic CALL: · Based on behaviorist theory of learning. · Focus on receptive drills. · Mainly drill and practice type software. · Computer as tutor. · Learning activities promote language accuracy rather than fluency. · Designed to be implemented on mainframe and mini computers. Criticism of Behavioristic CALL: The Behaviorism and Audiolingualism were rejected theoretically and pedagogically by theorists and practitioners.

·1979-Introduction of 8088 processor. ·1979-Compact disk was invented.		

Communicative CALL

Personal Computers (PC) (1980s)		
Technological Development by Year	**Approaches to Language Teaching**	**Approaches to CALL & Examples**
·1980-Development of MS-DOS/PCDOS began by Microsoft ·1981-The first WIMP (Windows, Icons, Menus and Pointing Devices) by The Xerox Palo Alto Research Lab. ·1982-The TCP/IP Protocol established, and the "Internet" is formed. ·1982-80286 processor was released. ·Compaq released their IBM PC compatible. ·1983-MS-DOS 2.0 was released. ·Hewlett-Packard released LaserJet printer. ·AT was released. ·Apple Macintosh was released. ·1984- MS-DOS 3.0 was released. ·80386 DX was released. ·1985- Microsoft Windows was launched. ·1985- EGA was released. ·1985 - 80386 DX was released ·VGA was released. ·1988 - MS-DOS 4. The development of word processing such as: · WordMaster · WordStar · WordPerfect	Cognitive Psychology Communicative Language Teaching Transformational Grammar Principles of Language Learning: · Learning is process of discovery, expression, and development. · Focus on functions of the language. · Emphasise on language use rather than usage. · Contextualization is important. · Communicative competence is the desired goal. · Focus on using language forms rather than forms themselves. · Teach grammar implicitly. Encourage students to produce language rather than manipulate the language, (Brown, 1994).	Communicative CALL: (e.g. Storyboard, Text reconstruction, Cloze exercises) · Serious educational Applications appeared. · A boom of CALL due to the introduction of Personal Computer Main Characteristics: · View that drill and practice exercises did not yield enough genuine communication. · Computer-based activities · Focus on using the language in context. · Non-Drill Practice format Type · Text reconstruction · Paced reading · Cloze exercises Criticism of Communicative CALL: Computers were not fully well integrated into the curriculum. The greater contribution is on marginal rather than the central educational elements.

Integrative CALL: multimedia CD-ROM

Multimedia CD-ROM (1980s-1990s)		
Technological Development by Year	**Approaches to Language Teaching**	**Approaches to CALL & Examples**
·1982 Audio CDs was introduced. ·1982 Book on Audio CDs was introduced by Sony and Phillips. -beginning of the Compact Disk. ·1982 MIDI, Musical Instrument Digital Interface was introduced. ·CD-ROM, invented by Phillips, produced by Sony. ·1989 CD-I released by Phillips and Sony. ·1989 Release of Sound Blaster Card, by Creative Labs ·1990 Introduction of Windows 3.0 by Bill Gates & Microsoft. ·1990 - MPC (Multimedia PC) was introduced. ·1991 - 80486 DX was released. A sound card and triple speed CD-ROM were added. ·1992 Introduction of CD-I launched by Phillips. ·1993 Pentium was released. ·1993 a CD-ROM drive capable of 300KB/sec (double speed) was introduced.	Humanistic Approach · Focus on Communicative Language Teaching: · Focus on meaning. · Use of authentic, meaningful and contextualized materials. · Fluency in language is a primary goal. · Focus on interactive language learning. · Consider learners' factors such as age, interest, learning styles, motivation. · Tasks relevant to students' real life interests and experiences (Felix, 1998). · Shift away from language usage to language use (Felix, 1998) · The teacher became a facilitator rather than the person who gives out information.	Integrative CALL:Multimedia CDROM (eg.Toolbook, Authorware, Planet English, Real English, Wiser Educator) Main Characteristics Use advantages of multimedia CDROM in teaching language for communicative purposes ·Allow computer to incorporate a variety of media (text, graphics, sound, animation, and video) by Hypermedia ·Emerge of friendly-user, powerful authoring software such as ToolBook, Authorware, and Director ·Based on communicative language teaching approach ·Built on student's intrinsic motivation ·Foster the interactivity between the learner and the learner, and learner and computer ·Multimedia resources are linked together ·Learners can navigate their own path and set their own pace by pointing and clicking mouse ·More authentic language learning environment is created ·The four language skills are integrated ·Focus on content and language skills ·Allow learners to link to a variety of sources such as grammatical

		explanations, glossaries, pronunciation, exercises, etc.

Integrative CALL: internet applications :

Computer-Mediated Communication (1990s-present)		
Technological Development by Year	**Approaches to Language Teaching**	**Approaches to CALL & Examples**
· 1969-Computer-mediated communication (CMC) but serious applications appeared in early 1990s. · 1960s-Hypertext was invented by Ted Nelson. · 1989- World Wide Web—the integration of hypertext and the Internet- was invented by Tim Berners-Lee. · 1990- Internet applications became popular such as Email, FTP, Talk (UNIX system) · 1992- Gopher was released. · The release of CERN (WWW), a hypertext based system for finding and accessing internet resources. · 1993- Mosaic (Web browser) was released. · 1994- Netscape 1.0 was released. · 1995- Windows '95 was launched with Internet Explorer by Bill Gates & Microsoft. · 1995 - JavaScript was introduced by Netscape. · 1998 – Windows'98 was released. · 1995-1999 - Development of: · QuickTime · Real Audio	Communicative Language Teaching Focus on using the internet applications for communicative language teaching: · Foreign language learning will be an acquisition of language content through purposeful and reflective participation. · The curriculum is dynamic. · The role of the teacher is a facilitator, an inseminator of ideas, who draws student's motivation. · The learner is responsible, reflective and creative. · Textbook is a resource along with electronic resources. · Classroom becomes a reconfigurable space with electronic facilities. (Debski (1997:47-48)	Integrative CALL: Internet Applications (eg. E-mail communication, FTP, World Wide Web, Chat, Gopher sites, MOO servers, CU-SeeMe, Desktop Video Conferencing) · Aim at integrating computermediated communication applications for communicative language teaching as follows: E-mail · Allow learners to have direct communication around the globe. FTP · Allow learners and teachers to download documents, graphics, sounds, videos, and animation. WWW · Learners search and share different kinds of files on the internet (documents, graphics, sounds, video, animation). Chat: · Allow learners to have real time communication. Main Characteristics: · Allow computer to incorporate a variety of media from the internet such as text,

· Real Movie · Shockwave · Web-based E-mail · Web-based Chat · Voice Chat · Internet Phone · Emerge of web authoring software such as Hot Potatoes, Authorware, and Director. · Desktop Conferencing		graphics, sound, animation, and video. · Internet resources are linked Together by Hypermedia. · Based on communicative. Language teaching approach. · Built on student's intrinsic motivation for authentic communication. · Encourage interactivity between the learner and internet users around the world. · More authentic language learning environments are created. · The four language skills are integrated (listening, speaking, reading, and writing). · Focus on a variety of content and multi-cultures.

Table1. 1: CALL DEVELOPMENT BY WARSCHAUR (1996)

Appendix B

Nickname:

Advanced Grammar Pre-Test: please tick the correct answer according to you.

1. If _____ a man on the moon, why can't they sort out paper-jams?!?!
    a. ○ we are landing ○ they were able to land ○ we had landed ○ they had landed
2. It'll be fine _____ you do it the way I told you.
    a. ○ as like ○ as could ○ so as ○ as long as
3. Sarah would have made sure John was here _____ were coming too.
    a. ○ when she had known I ○ if he has known you ○ if she had known you
       ○ if she knew
4. You're not that good at singing - _____ yourself!
    a. ○ get rid of ○ get over ○ get out ○ get lost
5. _____ different food from all over the world in London.
    a. ○ There are a lot of ○ There's loads of ○ There's many ○ There is a lots of
6. How many times _____ not to do that?
    a. ○ haven't I told you ○ have I told ○ I told you ○ have I told you
7. "What's up with him?" "Oh, _____ mood about something."
    a. ○ he's in angry ○ he's in a bad ○ he had a bad ○ he has a angry
8. "Paul's loving his new job in the States." "What? I didn't _____ abroad!"
    a. ○ even know he was living ○ even knew he is living ○ know he has lived
       ○ know he does live
9. Remind me again - what _____ tea tonight?
    a. ○ do you like for ○ do you want ○ you want to have for ○ did you want for
10. "James said that _____ word with me." "Yeah, come in and have a seat."
    a. ○ you can have a ○ you wanted to have a ○ you will want to have a
       ○ you had a

Nickname:

Advanced Grammar Post-Test: please tick the correct answer according to you.

.

○ **A.** I think the show is about starting now

○ **B.** I think the show is about in start now

○ **C.** I think the show is about to start now

.

○ **A.** You would have heard the news yet

○ **B.** You won´t have heard the news yet

○ **C.** You will have heard the news yet

.

What do you think...

○ **A.** you´ll do

○ **B.** you´ll be doing

○ **C.** you are doing

    ... ten years from now?

.

○ **A.** That´s a small Victorian round wooden table

○ **B.** That´s a Victorian small round wooden table

○ **C.** That´s a Victorian round wooden small table

.

○ **A.** I was going to call you

○ **B.** I was thinking of call you

○ **C.** I was calling you

    ... but then I forgot

○ **A.** At the time

.

   ○ **B.** In time

   ○ **C.** By the time

    ... I got to the airport, the plane had left

.

   ○ **A.** Bicycles are widely used in Amsterdam

   ○ **B.** Bicycles use widely in Amsterdam

   ○ **C.** Bicycles are in use widely in Amsterdam

.

   ○ **A.** The children were looking after by my mother

   ○ **B.** The children looked after by my mother

   ○ **C.** The children were being looked after by my mother

---

.

   ○ **A.** I´ve just been done at the hairdressers

   ○ **B.** I´ve just cut my hair at the hairdressers

   ○ **C.** I´ve just been to the hairdressers

    ... what do you think?

0.

   ○ **A.** Sarah got her handbag snatched

   ○ **B.** Sarah had her handbag snatched

   ○ **C.** Sarah´s handbag had snatched

Appendix B

Questionnaire

Dear Students

This questionnaire is part of a master research thesis, it investigates the effects of using computer software designed for English language learning in the Algerian classroom setting. Please answer the questions as honestly and clearly as possible and THANK YOU.

Section one: Background Information:

1) How long have you been studying English?
.... years.
2) Do you use computers and the internet in learning English?
Never ☐   Rarely ☐   Sometimes ☐   Always ☐
3) If you use it, what kind of means do you use?
Google ☐   YouTube ☐   E-Books ☐   Other Software ☐

Section two: Reactions and Opinions about the Material provided:

1) Please rate the software according to your satisfaction and how much do you find it helpful:

	Not useful	Useful	Very useful
the level of knowledge (grammar lesson)			
The level of speaking and Listening skills			
The level of reading and writing skills			
Encouraging self learning (Autonomous learning)			

2) If you find other things you like please mention here:………………………………………….
3) After using this software, are you open to use it or similar software more in the future?
Yes ☐   No ☐
4) Would you recommend using this approach of using computer to learn English by yourself to other students or people in the future?

Yes ☐   No ☐

Section three: Motivation

1) Do you find the use of this software to learn English interesting?
Yes ☐   No ☐

2) On a scale of 5, how much does the use of this software affect your motivation in comparison to the traditional methods of teaching? (0= no effect, 5=have a great effect)

☆ ☆ ☆ ☆ ☆

Summary:

The study aims to investigate the effects of using CALL on the level of knowledge and language skills as well as motivation and attitude. In an effort to answer these questions, a quasi-experiment was conducted in the department of English language in Belhadj Bouchaib university centre, where first year students answered tests before and after using the software for a fortnight, in an effort to answer the first question. The second question was addressed by means of a case study in which questionnaires were administered. The data gathered was analysed quantitatively. The findings obtained from the data confirmed that the software aided in increasing the students' knowledge and helped in improving their four skills, as well as help in increasing the motivation of the students.

Key words: CALL, grammar, language skills, motivation.

الملخص :

الهدف من هذا البحث هو دراسة أثار استخدام CALL على مستوى المعرفة والمهارات اللغوية بالإضافة إلى التحفيز. في محاولة للإجابة على هذه الأسئلة ، أجريت شبه تجربة في قسم اللغة الإنجليزية في مركز جامعة بلحاج بو شعيب ، حيث أجاب طلاب السنة الأولى على اختبارات قبل وبعد استخدام البرنامج لمدة أسبوعين ، للإجابة على السؤال الأول. تم أجيب السؤال الثاني عن طريق دراسة حالة تم فيها توجيه استبيانات لنفس الطلبة . تم تحليل البيانات التي تم جمعها كميا.

أكدت النتائج التي تم الحصول عليها من البيانات أن البرنامج ساعد في زيادة معرفة الطلاب وساعد في تحسين مهاراتهم اللغوية الأربع ، وكذلك المساعدة في تحفيز الطلاب.

الكلمات المفتاحية: CALL ، قواعد اللغة،المهارات اللغوية،التحفيز

Résumé :

La recherche vise à étudier les effets de l'utilisation de CALL sur le niveau de connaissances et de compétences linguistiques ainsi que sur la motivation et l'attitude. Afin de répondre à ces questions, une quasi-expérience a été menée dans le département de langue anglaise du centre universitaire de Belhadj Bouchaib, où les étudiants de première année ont répondu aux tests avant et après avoir utilisé le logiciel pendant une quinzaine de jours. Pour répondre a la première question. La deuxième question a été traitée au moyen d'une étude de cas dans laquelle des questionnaires ont été administrés. Les données recueillies ont été analysées quantitativement. Les résultats obtenus à partir des données ont confirmé que le logiciel a aidé à accroître les connaissances des élèves et a contribué à améliorer leurs quatre compétences linguistiques, ainsi que d'aider à accroître la motivation des élèves.

Mots Clé : CALL, grammaire, compétences linguistiques, motivation